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A Geographic Analysis of Armed Conflict Events in Sudan 1980-1990

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A Geographic Analysis of Armed Conflict Events in Sudan 1980 - 1990

By

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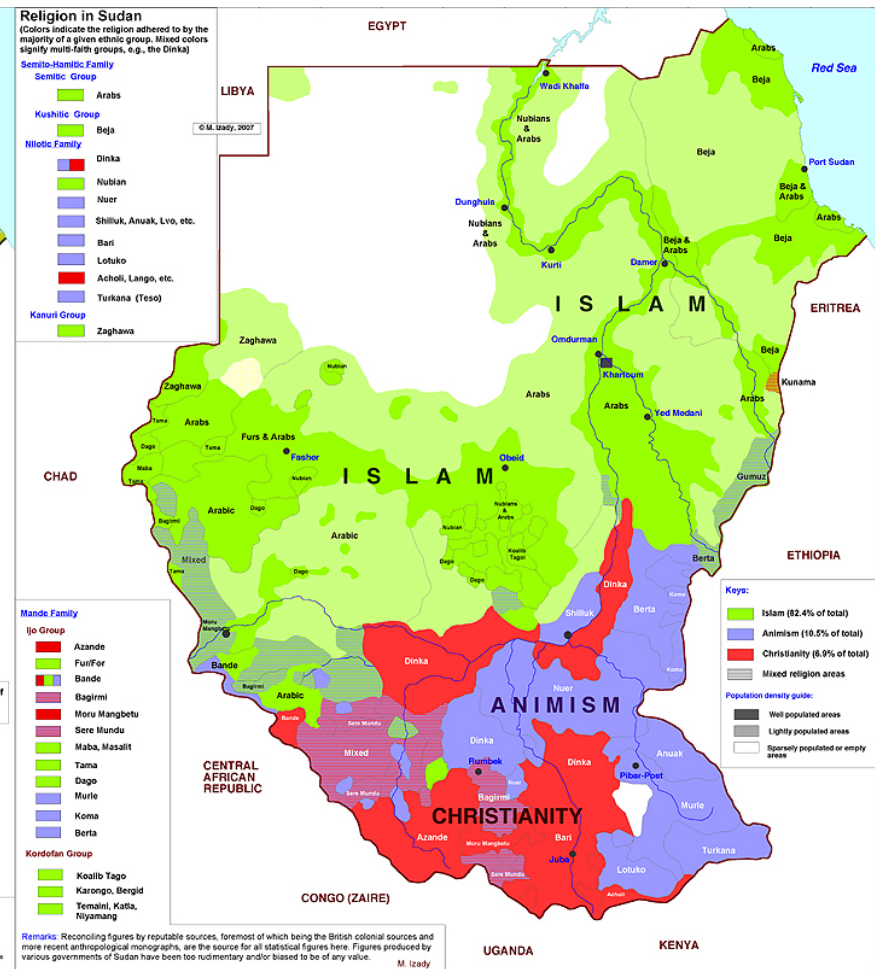
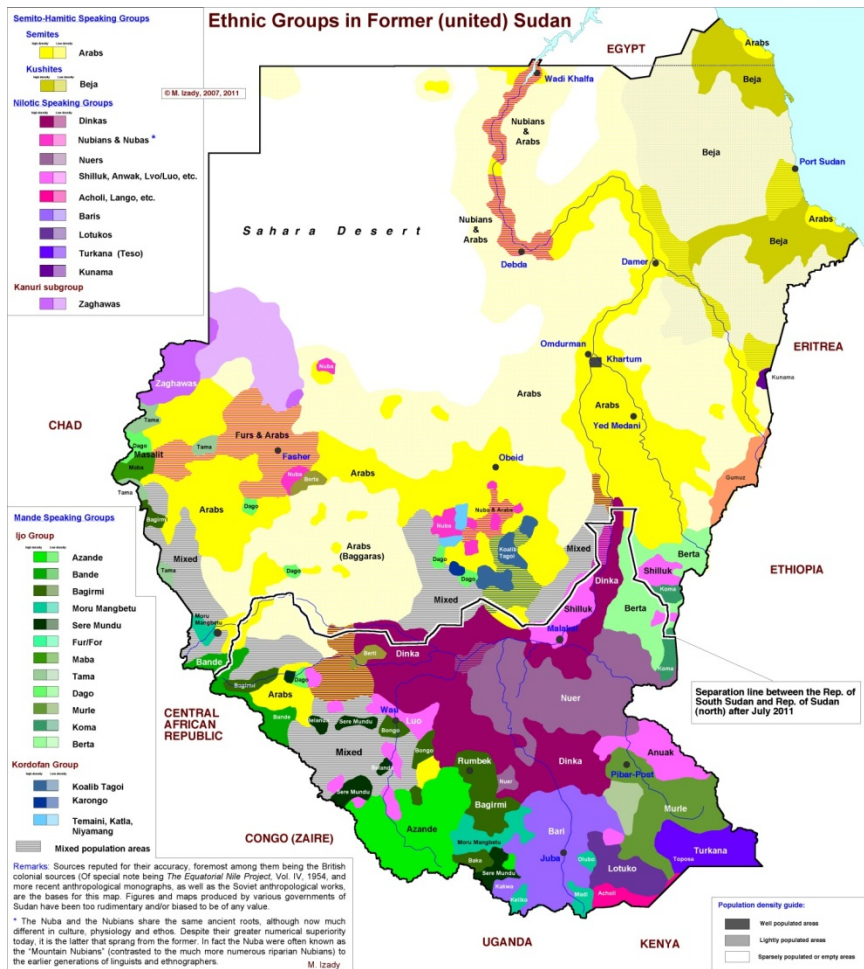
Introduction

The nature of violent conflict, through the context of political, economic, and social processes that shape conflict, has changed in the last twenty-two years. In the twelve years following the end of the Cold War, there were 8.5 internal wars for every international war. That was an increase from five to one for the previous forty-five years following the end of World War II (O'Loughlin and Raleigh 2007, 3). One reason for this global rise in civil wars is the positive correlation between countries with internal conflict and their neighbors experiencing internal conflict (Collier 2003, 35). Sudan is no exception. Seven of Sudan's eight neighbors experienced their own civil wars from the 1960s through the 2000s, and Sudan experienced two civil wars of its own from 1956-2005. One can gain a larger understanding of how the Second Sudanese Civil War fluctuated when contextual research is combined with data on the location and frequency of armed conflict that has been disaggregated from news sources.

Ethnic Composition and Distribution

The former country of Sudan is one of the largest in Africa and is comprised of over 500 different ethnic groups that speak over 100 different languages (Map 1). Seventy percent of Sudanese are Sunni Muslim (Dean 2000, 72) and concentrated mostly in the north, while the remaining thirty percent are traditional animist and Christian (Map 2). Those in the north share a common identity through their Arab culture; ethnic or regional divisions are rare. These include the Beja peoples concentrated in the Red Sea Hills area surrounding Port Sudan, the Fur peoples concentrated in Darfur, where Northern Darfur, Western Darfur, and Southern Darfur meet, and the Nuba peoples concentrated in the Nuba Mountains border area between northern and southern Sudan in Southern Kordofan. The two official languages of Sudan are Arabic and English, but northern tribes speak numerous other languages, such as Nubian, Ta Bedawie, and Fur.

Southern Sudan is home to such diverse ethnic and tribal groups as the Dinka, Nuer, Kakwa, Bari, Azande, Shilluk, Kuku, Murle, Mandari, Didinga, Ndogo, Bviri, Lndi, Anuak, Bongo, Lango, Dungotona, and Acholi (CIA 2012). The Dinka peoples make up southern Sudan's largest tribal group and are concentrated in the central area of Unity, Warab, Lakes, and extend north through the Upper Nile state. By 1984, the Dinka numbered as many as two million (Hindy 1984). The next most populous tribal group is the Nuer. The Nuer people are surrounded by the Dinka on three sides, locally concentrated in Upper Nile and Jonglei states. The Bari people inhabit the Central Equatoria state surrounding Juba. The remaining smaller tribes are scattered throughout the southern region of South Sudan (Map 1). The official languages of South Sudan are English and Arabic (including Juba and Sudanese variations). However, other regional languages, such as Dinka, Nuer, Bari, Zande, and Shilluk, are also spoken (Map 1).



gulf2000.columbia.edu/images/map

Map 1: Ethnic and Linguistic Groups, Sudan

Map 2: Religious Composition, Sudan

Due to the diversity of tribal groups in southern Sudan and the overlapping of traditional grazing areas, conflict between these groups was more common than for their neighbors to the north. The Dinka and the Nuer regularly feuded, as did the Dinka and the Baggara (Dean 2000, 79). In fact, ethnic dominance of one group over another increases the risk of rebellion (O'Loughlin and Raleigh 2007, 11), but it was not until the formation of the armed guerilla rebel group, the Sudan People Liberation Army (SPLA), in 1983 that these groups found common ground enough to band together against the north. However, their unification did not last through the duration of the Second Sudanese Civil War. The Nuer, feeling the same dominance by the Dinka within the SPLA as southerners felt about the north, split within the ranks of the SPLA in 1991 (Dean 2000, 80). Even with South Sudan now an independent country, inter-tribal conflict in the south is still prevalent today (The Economist 2012).

Basic Social Indicators

The most reliable indicator for the measure of human development is a summary known as the United Nations Development Programme's (UNDP) Human Development Index (HDI). The three components that make up the HDI are health (life expectancy at birth), education (mean years of schooling and expected years of schooling), and living standards (gross national income per capita). This composite index was created to emphasize people and their capabilities, not just economic growth, to measure a country's level of development (UNDP 2011). According to the 2011 Human Development Report, Sudan was listed as having low human development, ranking 169th out of 187 countries (UNDP 2011). This low ranking is not surprising when considering Sudan's economy, education, and health.

Table 1: Sudan Basic Social Indicators, 1981-2010

| | <u>1981</u> | <u>1985</u> | <u>1990</u> | <u>1995</u> | <u>2000</u> | <u>2005</u> | <u>2010</u> |
|---|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Total population | 20,750,557 | 23,542,778 | 26,494,169 | 30,141,147 | 34,187,729 | 38,410,320 | 43,551,941 |
| Population ages 0-14 (% of total) | 45 | 45 | 44 | 43 | 42 | 41 | 40 |
| Gross Domestic Product (current US\$) | 9,538,009,463 | 12,459,352,088 | 12,408,648,108 | 13,830,459,816 | 12,366,140,066 | 27,386,699,507 | 62,045,783,133 |
| Gross Domestic Product, per capita (current US\$) | 459.65 | 529.22 | 468.35 | 458.86 | 361.71 | 713.00 | 1424.64 |
| Life expectancy at birth, total (years) | 50 | 51 | 53 | 54 | 57 | 60 | <i>N/A</i> |
| Birth rate, crude (per 1,000 people) | 44 | 43 | 41 | 39 | 38 | 35 | <i>N/A</i> |
| Mortality rate, under 5 (per 1,000 live births) | 140 | 133 | 125 | 119 | 114 | 109 | 103 |

data.worldbank.org/indicators

Table 2: Human Development Index Trends, 1980-2011

| | <u>HDI Value 1980</u> | <u>HDI Value 1990</u> | <u>Avg. Annual HDI Growth 1980-2011</u> |
|--------------------|------------------------------|------------------------------|--|
| Sudan | 0.264 | 0.298 | 1.41 % |
| Sub-Saharan Africa | 0.365 | 0.383 | 0.77 % |

Human Development Report 2011

Population and Health

According to the World Bank, Sudan's population had reached 20,750,557 in 1981 (Table 1). Between 1980 and 1990, the time frame of focus for this study, Sudan saw a population growth rate of roughly 2.77 percent, leading to a population of almost 26.5 million in 1990, with a population density of about eleven people per square kilometer. While Sudan's total population increased by nearly six million people in those ten years, its population density increased by only two people per square kilometer. It is also important to note that Sudan's population has more than doubled in the thirty years between 1980 and 2010. The reason for this is twofold: that life expectancy has increased incrementally from fifty years in 1981 to sixty years in 2010, and the infant mortality rate has decreased dramatically in that same time period: down from 8.7 percent in 1981 to 6.6 percent in 2010. Although the HDI for Sudan was lower than the rest of sub-Saharan Africa in 1980 and 1990, improvement for Sudan's HDI is evident over the last thirty years: the annual HDI growth for Sudan from 1980-2011 is greater than that of sub-Saharan Africa over the same time frame (Table 2).

Economy

As of 1980, agriculture contributed almost forty percent of Sudan's Gross Domestic Product (GDP), and earned ninety percent of its foreign exchange. Four-fifths of the population was still dependent on subsistence agriculture (Africa Research 1979/1980, B118). Sudan's per capita GDP growth throughout the 1980s and 1990s was stagnant, and it wasn't until after 2000, with the oil sector driving growth, that Sudan saw any significant change in household income. Even though GDP per capita doubled from 2005 to 2010 (Table 1), the average Sudanese still must live on \$3.90 per day. As Paul Collier has shown, economic underdevelopment is one of

the root causes of conflict and the greater the national income, the less chance of civil war (O'Loughlin and Raleigh 2007, 10-12).

Throughout the 1980s, African countries became more and more reliant on foreign aid due to their rising national debt. These indebted countries would then seek further financial assistance from the International Monetary Fund (IMF) and World Bank through Structural Adjustment Policies (SAPs). Unfortunately, SAPs forced governments to implement market-led policies to reduce spending that often had a direct negative effect on the population, sometimes felt immediately. These policies associated with structural adjustment involved reducing subsidies, privatization of public services, raising taxes, allowing more foreign investment by removing or lowering trade barriers, and devaluing the currency (Williams 2009, 316-17).

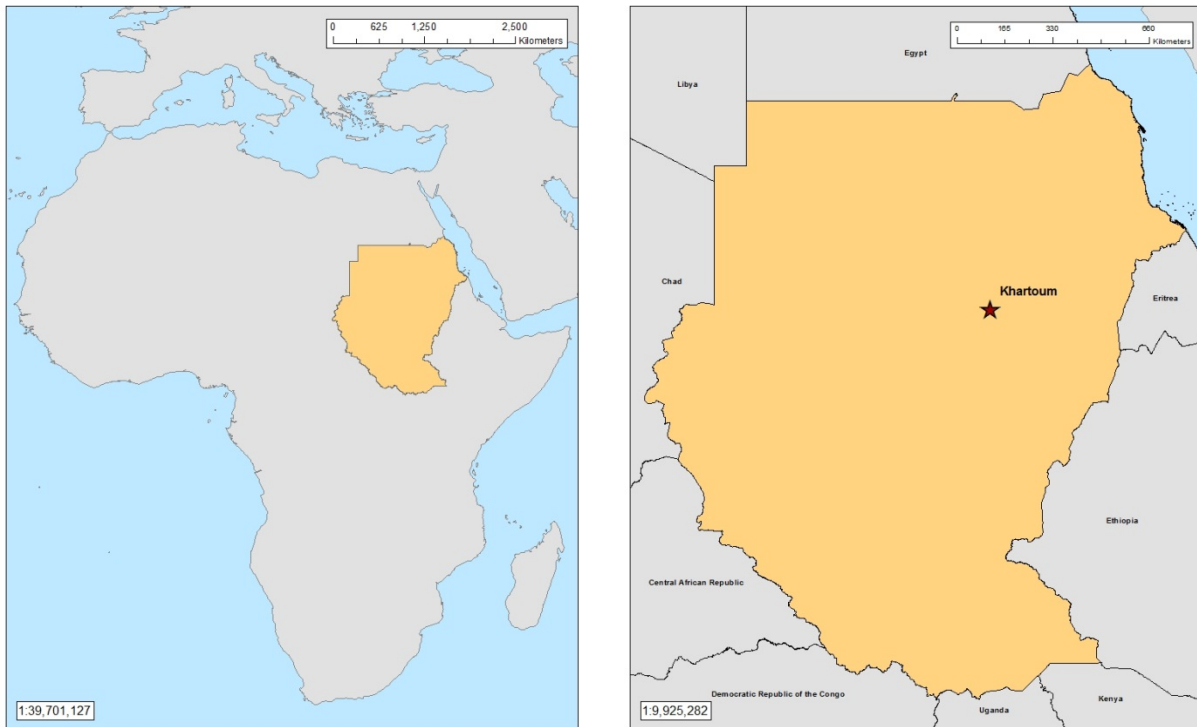
By 1978, due to poor governance, ill-fated schemes, a slow recovery from the seventeen year-long First Sudanese Civil War, Sudan found it necessary to seek help from the IMF and the World Bank. By the mid-1980s, decades of stagnant economic growth had made all of Sudanese grow weary of the IMF's SAPs (Woodward 2009, 178). The negative effects of neoliberal policies create perceptions of external ideas being imposed on Southern governments and their citizens. "Such policies usually resulted in economic stabilization in the short-term, but the longer-term implications for economic growth, social inequality and poverty are mixed." (Williams 2009, 128)

Education

Education was lacking in the south and other parts of the country when Sudan gained its independence in 1956. Educated people in the south were few and disadvantaged due to earlier decades of neglect, as the government in the north only needed a few educated southerners to fill

rudimentary positions and few Southern men who were adequately prepared for the modern forms of administration and commerce (Johnson 2003, 15). New secondary schools opened in the North but to reduce the influence of radical students, the schools were located away from towns. In the 1950s, a secondary school was opened in the south for the first time at Rumbek in eastern Bahr al-Ghazal province (Woodward 1990, 80). In the early part of the twentieth century, the British administrators of Sudan were averse to creating an educated class of indigenous civil servants because they felt that an educated class would be more difficult to rule. Therefore, before independence in 1956 most of the junior administrative positions were filled by officers in the Egyptian army. After independence these administrative positions were filled by educated northern Sudanese, leaving southern Sudanese neglected in their native areas (Johnson 2003, 15).

In fact, educational development across the entire southern region was discouraged by the central government in Khartoum. Only the religious schools, or *Khalwas*, which served small Muslim urban communities in Sudan, received some support from the government. In contrast, the Christian mission schools that operated intermittently in the rural areas and the far outposts of the south received little to no funding from the government.



Map 3: The Former Republic of Sudan, 1956 - 2011

History of Sudan

Early Sudan

The continent of Africa has a long and complex history, complicated further by outside forces claiming territory throughout the eighteenth and nineteenth centuries. Sudan's violent conflict at the beginning of the 1980s can be traced back to the Turko-Egyptian invasion of the Sudan in 1820 and through subsequent Turko-Egyptian rule until 1882. During this time period a pattern was established in which economic opportunity and access to political power became influenced by racial origin and religion (Johnson 2003, 75). When Sudanese Muhammed Ahmed came to power in 1882, after the defeat of the Turko-Egyptian regime, he sought the submission of southern Sudanese just as the Turko-Egyptian government had by enforcing the

same “coercive policies” (Johnson 2003, 11). Southern Sudan found itself on the periphery of the overtly central Muslim government based out of Khartoum in the north. The pattern of favoritism that Ahmed demonstrated toward the ‘believers’ in Islam continued after his reign into the nineteenth and twentieth centuries.

Toward the middle to late nineteenth century, competition between European powers in Africa intensified to a degree which the competition threatened to turn into major conflict. To avoid conflict European leaders convened in Berlin in 1884 to partition Africa into areas to be ruled by outside forces. Between 1884 and 1890, the entire continent of Africa was partitioned amongst France, Belgium, Italy, Portugal, Spain, and the United Kingdom (Chamberlain 2010, 53). This partitioning is referred to today as the “Scramble for Africa.” Little resistance was shown by native Africans, and only Liberia and Ethiopia remained independent. Between the rule of the Turko-Egyptians under the Ottoman empire and the coming British-Egyptian co-rule, the Sudanese had known independence for only sixteen of the previous seventy-eight years and it would be another fifty-four years before they would know it again.

The Condominium, 1898 - 1956

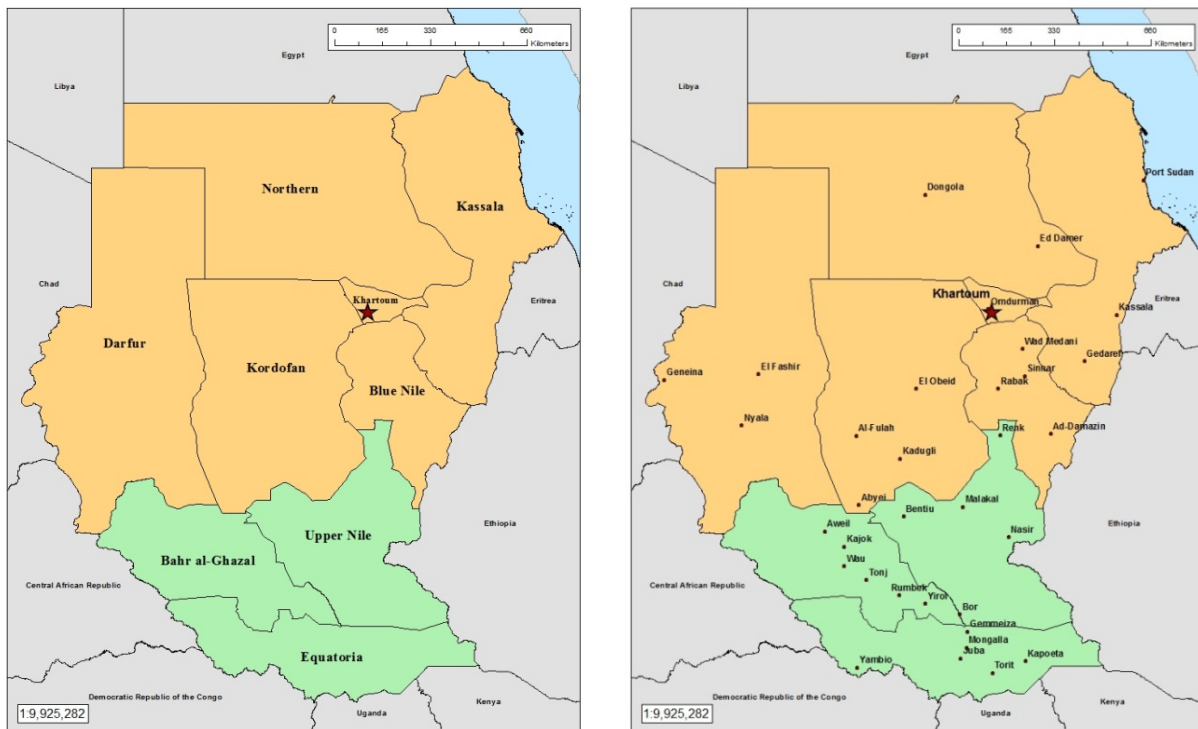
The Egyptian Army, rebuilt by British officers since colonial rule there started in 1882 and equipped with innovative weaponry, received order to invade the Sudan in 1896. The Anglo-Egyptian Army advanced up the Nile and defeated Khalifa of the Mahdi at the Battle of Karari, effectively ending a sixteen year autocratic rule of the Sudan. After successful diplomatic negotiations for the remaining territory with France and Belgium, Sudan was fully conquered by the British in 1898. The Anglo-Egyptian Agreement of January 1899 established condominium rule, a new form of government at the time (Woodward 1990, 15). The Sudan was

in a unique situation during the years of colonial rule in Africa, as the condominium was a grey area of ownership between the British and Egypt.

The Condominium introduced Western ideas and institutions by British officials. These new ideas combined with the influence of Egyptian culture and changed the traditional patterns of Sudanese government and society. The British government administered Sudan through the Egyptian military and enacted laws that the Sudanese were to follow, all funded by taxes raised by Sudanese and Egyptian citizens. The British brought technology with them to Sudan, which they applied to the traditional subsistence economy, and the Parliamentary democracy of England. During condominium rule, Sudan's power was centralized in Khartoum in the north. After independence, the political institutions from colonial rule remained, and power remained centralized in Khartoum, thereby spreading animosity between northern and southern Sudanese.

Independence, 1956

Animosity in the south toward the north dates back to the early 1880s, when the "... government burned [southern Sudanese] villages, seized cattle as 'fines', and carried off war captives and hostages ... for conscription in the army." (Johnson 2003, 10) When the transfer of power from a British Condominium to Sudanese independence occurred, retained was the, "... colonial structure intact from Britain to the Sudanese nationalists." (Johnson 2003, 22) The domination of the Northern Arab administration of the Southern Sudanese left by the British ultimately led to mutiny of the Equatorial Corps in the Equatoria province in the South in 1955 (Collins 1984, 26). "... [T]he basis of internal disparities" and uneven development in the North as well as within the South lied in, "... differences in the administration of the pastoralist and sedentary communities in the South." (Johnson 2003, 17)



Map 4: Provinces and Cities of Sudan and southern Sudan

Perhaps what was most responsible for Sudan's independence was Egypt's revolt in July 1952. The administration that took control was more understanding to the wave of nationalism spreading through Sudan than the previous government (Collins 1984, 25). In February 1953, the Condominium of Britain and Egypt signed a statute allowing Sudan self-government within three years (Collins 1984, 25).

A quick transition to independence failed to address two important issues facing the constitution. First, it was undecided on whether Sudan would be federal or unitary. Concerned that a Muslim-controlled central government would continue to dominate the south, southerners preferred a federalist system. However, northern politicians were concerned that a federal system would eventually lead to a southern separatist movement. The second issue that was

neglected was whether Sudan would officially be secular or Islamic (Iyob and Khadiagala 2006, 80). Both of these issues became important factors in the Second Sudanese Civil War.

Political Climate

The political climate in Sudan during the 1950s and 1960s provided little stability for northern and southern Sudanese alike. Politicians of this period perpetuated the uneven distribution of resources and maintained Sudan's socio-economic structure that was established under Condominium rule (Daly 1993, 13). As the 1970s approached, Sudan experienced its first successful *coup d'état* as a sovereign nation in 1969. Gafaar Nimeiri, Chairman of the ten-member Revolutionary Command Council (RCC), became Sudan's Prime Minister by way of a military coup in May 1969, the first of four coups in Sudan that occurred over the next twenty years. Nimeiri overthrew Muhammad Ahmad Mahgoub, who had been democratically elected as Sudan's Prime Minister, and the RCC became the ruling civilian cabinet of new administration (Khalid 1985, 13). A Sudanese, born in 1930 in Dongola, the capital of Northern State and grew up in Omdurman, the sister-city of Sudan's capital city, Khartoum (Woodward 1990, 251), Nimeiri led the so-called 'May Revolution.' Over the next sixteen years, Nimeiri continued the same attitude as previous administrations by giving very limited political sympathy and support for southern Sudanese (Johnson 2003, 31). This attitude of elitism and favoritism only contributed to Nimeiri's unpopularity in the south.

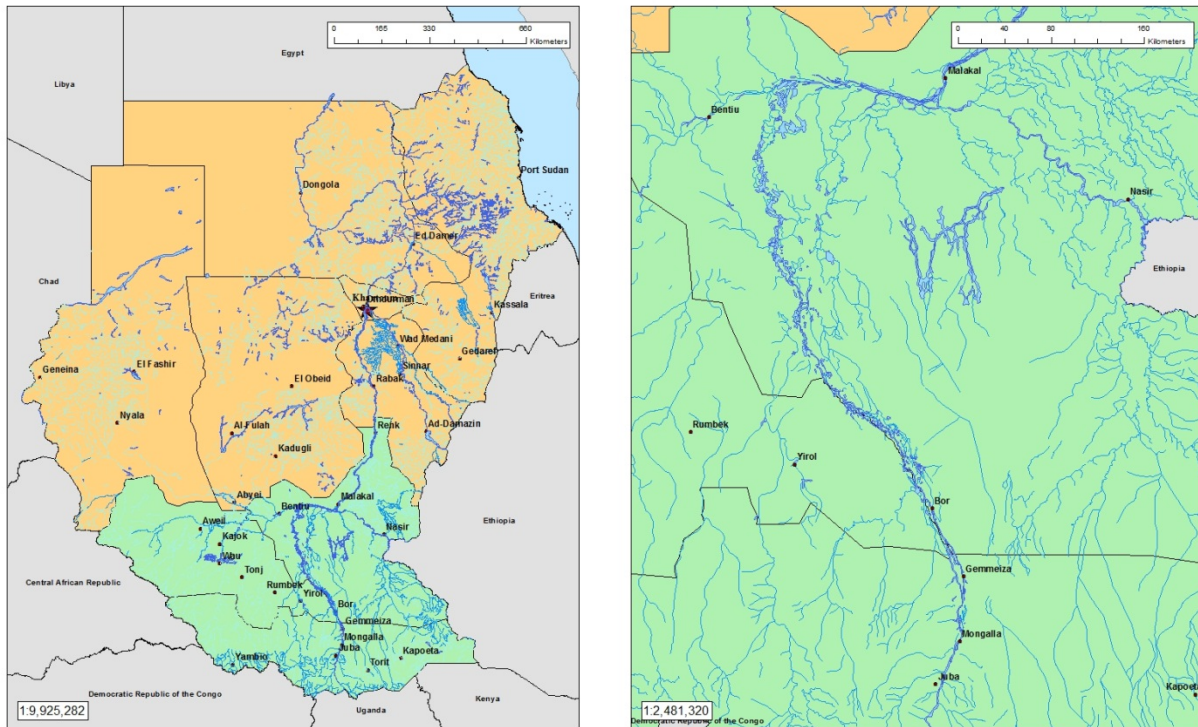
Nimeiri's political career survived an early coup attempt in 1970 by Sadiq al-Mahdi, who was previously Prime Minister of Sudan for less than twelve months between 1966 and 1967. The Communist-led coup of July 1971 was the only successful coup attempt until 1985. For a brief period, Nimeiri and the remaining RCC members were arrested but within three days a

counter-revolt was staged and Nimeiri's power was restored. This was to represent the second of five major coup attempts between 1970 and July 1976 (Woodward 1990, 150-151). Finally, during the Second Sudanese Civil War in April 1985, a co-civilian and military coup was successful in ousting Nimeiri after weeks of nationwide riots and protests while he was absent. When he tried to return home, Nimeiri was refused and his plane was forced to land in Cairo. A co-military and civilian interim government was put in place through the rest of 1985 until April 1986, when Sudan held its first elections since 1967.

Even though elections were held throughout the country, voting took place in barely forty percent of the southern constituencies (Johnson 2003, 199). With deepening famine and food crises, an increasingly more violent and active civil war, and an outrageous national debt, Ahmed al-Mirghani's served a short three years before being overthrown by today's current President of Sudan, Omar al-Bashir, in yet another military coup. Sudan's final coup in June 1989 led to a questionable voting process. Voting disparity between the north and south occurred once again, just as with the election of Mirghani in 1986. Although only votes could be cast in the north, the highly criticized election of a ruling military junta was legitimized (Dean 2000, 71).

Uneven Development

In 1983, two economic development projects in the South were halted due to guerrilla attacks. The Jonglei Canal and the Bentiu oil fields, were claimed to be for the greater good of all of Sudan but like most projects through Sudan's history, the benefits of these projects would be seen mainly in the north, if in Sudan at all (Daly 1993, 7). Also, ivory trade, which was legal at the beginning of the 20th century, benefitted the provincial governments very little, and in fact, the royalties collected from harvested ivory in the south went to Khartoum (Johnson 2003, 16).



Map 5: The Sudd Wetlands, southern Sudan

The plan for the Jonglei Canal, a development project that had a huge impact during the Second Sudanese Civil War, was first conceived in 1894 (Dean 2000, 76). It was to be built in the Sudd Wetlands, also known as the Bahr el Jebel swamps, is an immense swamp area in southern Sudan where the White Nile splits to form the Bahr al-Jabal and Bahraz-Zaraf rivers (Map 5). The Sudd marshland flooding is essential to the livestock and the livelihoods of the southern Sudanese (Allen 2010). The construction of the Jonglei Canal was proposed to meet the ever increasing demand for fresh water by northern Sudanese and Egyptians by diverting water around the Sudd from Bor to Malakal. By draining the wetlands, the Canal would improve northern Sudanese's and Egyptians' water supply by avoiding great losses of water, at the expense of those in the south who also relied upon the fresh water source. The canal became a

symbol of northern exploitation when it was realized that irrigation projects would benefit those in northern Sudan and Egypt while the Dinka, southern pastoralists, would see their livelihoods literally dry up.

In 1978, when construction on the Jonglei Canal began, oil deposits were discovered in the south and would also become a point of contention between the SPLA and the government of Sudan (Woodward 1990, 160). Oil was discovered in the Bentiu region in the south in the late 1970s and the government of Sudan decided against refining the oil in Bentiu, but rather began construction on a pipeline to transport the crude from the south to the Red Sea in the north. A United States' corporation, the Chevron Oil Company, first established a presence in the 1970s, near Bentiu in the Upper Nile State of southern Sudan. About 250 million barrels of oil were estimated to be recoverable from Bentiu area. Once again, the people of southern Sudan feared exploitation at the hands of the central government for its own gain. This was indeed the case as Numieri sought a further re-division of the Southern Region.

The Regional Self-Government Act of 1972, known as the Addis Ababa Agreement, defined the borders of southern Sudan and gave the region limited autonomy. Then, with the discovery of oil in the south, the government of Sudan sought to change the borders of the Southern Region, effectively negating the Addis Ababa Agreement that ended the First Sudanese Civil War. A new state, Unity, would be created from the Upper Nile state that lies between north and south Sudan and where the main oil deposits were located. Again, the south felt betrayed when it was learned that, not only would the oil not be refined in Bentiu, but it would be refined in Kosti, a town 775 kilometers from Bentiu, in northern Sudan. Ultimately, it was decided that a pipeline would be built to transport the crude oil pump from the south to the northern Red Sea port city, Port Sudan (Woodward 1990, 161). After two attacks by the SPLA

in four days in February 1984, Chevron decided it would stop all operations in Sudan, citing safety concerns. Attacks and kidnappings by the SPLA had shut down construction on both the oil fields in Bentiu and the Jonglei Canal by 1984 (Woodward 1990, 162).

With the unstable political climate, nation-wide uneven development, and mounting national debt since independence, it is little wonder that Sudan experienced internal violent conflict forty-four of its fifty-five years of independence.

First Sudanese Civil War, 1955 - 1972

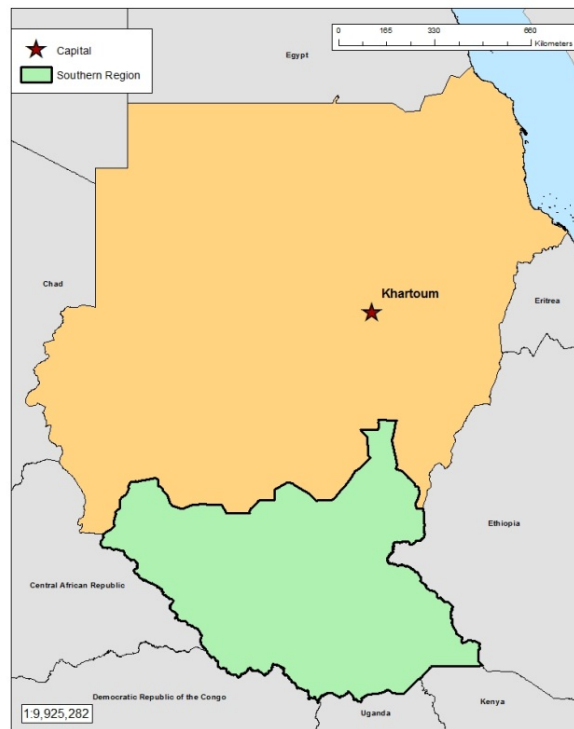
The Republic of South Sudan became the world's newest country in July 2011 after a peace agreement in 2005 that paved the way for South Sudan to secede from The Democratic Republic of Sudan. The price was heavy: numerous attempted coups, three successful coups, and two civil wars. The First Sudanese Civil War involved the centralized government of Sudan in Khartoum and its ultimate opposition, the Southern Sudan Liberation Movement (SSLM), led by Joseph Lagu and his guerrilla armed force, Anyana and was fought exclusively within the three provinces of southern Sudan (Johnson 1998, 55).

One factor that led to the First Sudanese Civil War was a combination of colonial neglect and exploitation that established the paradox of Sudan in which the southern region was the least developed, but also contained most of the nation's natural resources and land most suitable for farming (Johnson 2003, 16). "... [T]he basis of internal disparities" and uneven development in the North as well as within the South lied in, "... differences in the administration of the pastoralist and sedentary communities in the South" (Johnson 2003, 17). A second cause is how these southern communities were treated. Southerners were viewed as inferior and backward by northerners, a belief that lasted from the slave-raiding days of the eighteenth century to modern

history (Daly 1993, 5). Opposition to government only increased after the government began burning villages, arresting and torturing civilians in the South in the late 1950s (Johnson 2003, 31).

The mutiny of officers in Torit, Eastern Equatoria within Sudan's Armed Forces in 1955 was generally considered the start of the First Sudanese Civil War. However, only a few weeks of skirmishes occurred, affected very few in southern Sudan, and most remaining mutineers fled to Uganda or the more remote portions of Equatoria (Johnson 1998, 54). By 1962, a southern political organization called the Sudan African Nationalist Union (SANU) had formed from disenfranchised citizens of Sudan's authoritarian regime, senior political figures, and students who joined those in exile from the 1955 mutiny. The largely unorganized guerilla force behind the SUNA called itself Anyanya, "... known colloquially by the vernacular name of a type of poison." (Johnson 2003, 31) SUNA's position was that of self-determination, rather than complete secession, which, "... ran directly counter to the newly-formed Organization of African Unity's pledge to maintain the old colonial borders of the emerging states." (Johnson 2003, 31)

Along with the new government of Gafaar Nimeiri willing to negotiate with the South to end the war and meet its terms, the South itself was largely responsible for presenting a cohesive group for which the North could negotiate. Joseph Lagu had formed the Southern Sudan Liberation Front (SSLF) in January 1971, which later became the Southern Sudan Liberation Movement (SSLM), and commanded the Anyanya Armed Forces, whose weapons were steadily supplied by Israel (Johnson 2003, 37). A more unified fighting force with a firm arms supply, combined with the political organization of a clear leader, provided the South a foundation for which a peaceful solution could be reached with the government of Sudan. The road to a cease fire previously had begun with plans for regional self-government of the South in June 1969 but



Map 6: The Southern Region, Sudan, 1972

only came to fruition with the signing of the Addis Ababa Agreement in February 1972, which brought ‘regional autonomy’ and relative peace to the South (Johnson 2003, 36).

The Regional Self-Government Act, 1972

The Second Sudanese Civil War was fought largely over the abolishment of the 1972 Regional Self-Government Act, or the Addis Ababa Agreement, that brought an end to the First Sudanese Civil War (1955-1972). Under the Agreement, a new law formed, “... the law for Regional Self-Government in the Southern Provinces,” (Art 1) which gave the Southern Regions its own legislative and executive branches (Ch. II, Art. 5). The borders of the Southern Region would remain as they had since Sudan’s independence in 1956 and included the three Provinces

of Bahr El Ghazal, Equatoria, and Upper Nile (Map 6). Southern Sudanese, for the first time, were able to elect southerners to fill the positions of the newly formed People's Regional Assembly. However under the Addis Ababa Agreement, the President of Sudan retained the power to appoint the President of the High Executive Council based on recommendations from the People's Regional Assembly. Once the President of the High Executive Council was appointed, the positions of the High Executive Council itself were also appointed by the President of Sudan, based on the recommendations from the President of the High Executive Council. While the Addis Ababa Agreement was a step in the right direction for ending conflict between the North and South, it did not provide enough autonomy for the palates of southern Sudanese.

Under Chapter III, Article 7, both the People's Regional Assembly and the High Executive Council were prohibited from legislating or exercising, "... any powers on matters of national nature," to include, "National Defense, External Affairs, Currency and Coinage, Air and Inter-Regional Transport, Communications and Telecommunications, Customs and Foreign Trade, Nationality and Immigration, Planning for Economic and Social Development, Education Planning, [and] Public-Audit" (Chapter III, Article 7). "The regional government was specifically denied the right to legislate or exercise any power over economic planning," as outlined in Chapter IV Article 7.viii of the Agreement. (Johnson 2003, 40) The Southern Region was allowed to participate in customs and trade, but only within the boundaries of the Southern Region involving certain commodities and the Regional Government needed to submit for approval by the Central Government in Khartoum. Because the Southern Region was still under the greater law of the Constitution of Sudan put into effect after the Nimeiri revolution of

May 1969, the southern Sudanese were able to exercise little autonomy, nor did they have any say in matters of national concern.

In Chapter IV, Article 11, the Addis Ababa Agreement laid out what the People's Regional Assembly would legislate for, "... for the preservation of public order, interim security, efficient administration and the development of the Southern Region in cultural, economic and social fields," mostly though, within the larger framework of national laws. Although these provisions were guaranteed to all Southern Sudanese, they were all subject to veto by the President of Sudan. Also interesting is Article 22 of Chapter V which states that while, "The President and members of the High Executive Council may attend meetings of the People's Regional Assembly and participate in its deliberations," they had no right to vote on any of the issues unless they were already members of the People's Regional Assembly. This seems to contradict Article 28, Chapter VIII, which gave the President and the High Executive Council power to initiate laws within the People's Regional Assembly. Unfortunately, during the proposals and agreements in Addis Ababa no mention was given pertaining to either, "... economic powers of the new regional government [or] of national development policy as it applied to the South." (Johnson 2003, 39)

Pre-Civil War, 1980 - 1982

Leading up to the Second Sudanese Civil War, violence in 1980 was minimal and was centered in and near the nation's capital. There were reports of protests and riots in Khartoum and the bombing of villages in the east by foreign military. By the summer of 1980, the worsening economic conditions had become so deplorable that violent protests erupted in several Sudanese cities. In 1981, Sudan experienced a series of attacks from foreign forces. In early

autumn, aircraft belonging to the Libyan Air Force dropped bombs on Sudanese border villages in North Darfur. Several sources reported at least twenty-five villages were bombed between September 10 and October 20. Toward the end of 1981, a growing resentment of living conditions and governmental policies would start in the nation's capital.

Khartoum was the center of discontent once again as riots and protests bookended 1982. In the first week of January, what started small grew to extend across the country as people protested the rise in sugar prices and other commodities. Not only in Khartoum, but in at least ten other cities and towns across northern Sudan protests turned to riots and by the third day of protests the demonstrations grew to include opposition Nimeiri, the United States and the International Monetary Fund (IMF). By the end of the riots, police and students had been killed. The following week riots and protests flared up again in Khartoum and spread to other provincial towns. In September and December, more student demonstrations were held in Khartoum protesting Nimeiri's government, its involvement with the United States, and Israel's invasion of Lebanon in. On a trip to Rumbek, the southern provincial capital of Lakes, Nimeiri was confronted by about 150 anti-division student demonstrators. And he responded by shutting down the schools in the south (Hindy 1983). The anti-division sentiment would grow as it gained popular support by a majority of southern Sudanese.

Beginning of Second Sudanese Civil War, 1983 - 1985

Several factors lead to the beginning of the Sudanese Second Civil War. In January and February 1983, troops stationed in the south refused to surrender their weapons and rotate out to their new stations in the north. Then in May, northern troops were sent to put down a mutiny in Bor and Pibor in the south. Those troops were repelled and the soldiers stationed at Bor, Pibor,



Map 7: Re-division of the Southern Region, 1983

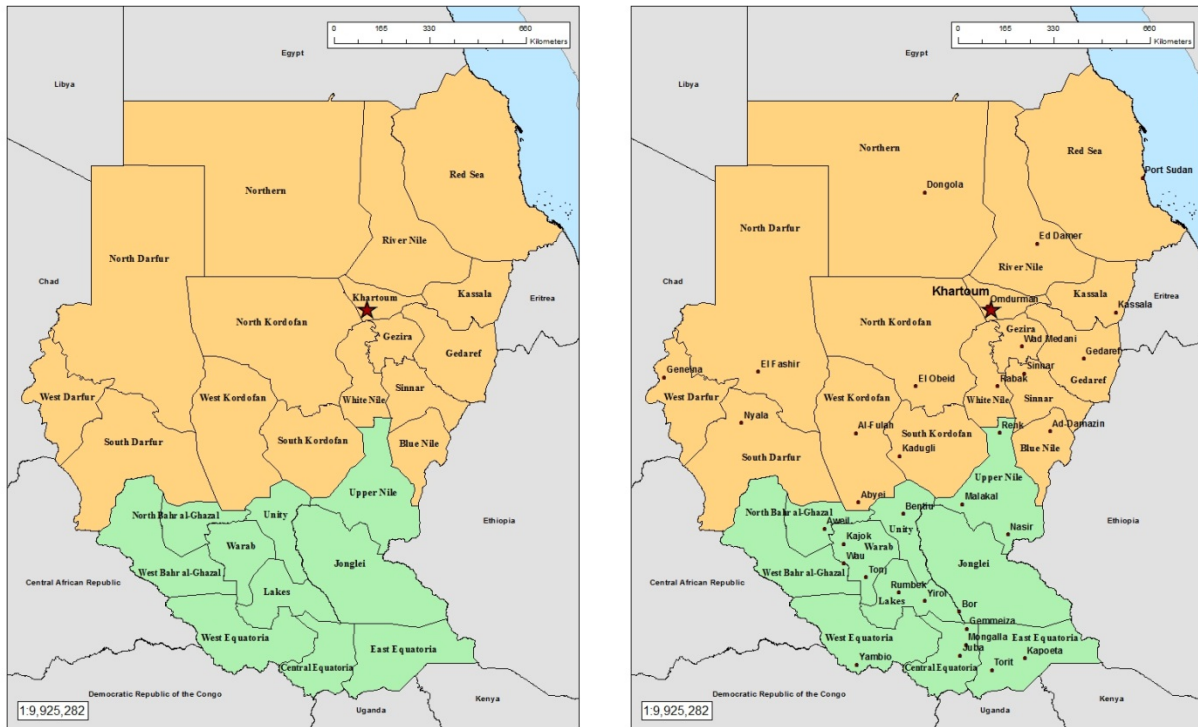
and Pochella retreated into the bush and travel toward Ethiopia where they would meet with other defectors from the police and army (Johnson 2003, 198). More mutinies and desertions followed in June. Also in May, Nimeiri dissolved the Regional Self-Government Act, organized regional governments in Upper Nile, Equatoria, and Bahr al-Ghazal (Map 7), and announced the appointment of governors and their cabinets to those regions Region without approval from the citizens of those regions (Woodward 158, 1990). This refusal by Nimeiri to abide by the constitution proved to the southern Sudanese that another rebellion was necessary in order to restore national unity.

When Nimeiri nullified the Addis Ababa Agreement in 1983, Southerners felt an immense sense of betrayal (Malwal 1985, 21). In July, John Garang, a Lieutenant Colonel from

the original Anyanya force of the First Sudanese Civil War, mediated a settlement between the defecting officers and convinced them to join him in establishing a base of operations inside Ethiopia. With aid from inside Ethiopia, supplied by Libya (Muammar Gaddafi and Nimeiri had a long-standing personal feud), and training from soldiers from Cuba, Garang was able to solidify the Sudan People's Liberation Movement (SPLM) and himself as the commander-in-chief of its armed guerilla resistance force, the Sudan People's Liberation Army (SPLA). Garang made his first public address on the newly founded Radio SPLA and outlined in detail the program of the SPLM. He called not for secession of southern Sudan, as was the case for the First Sudanese Civil War, but for "national unity and viewed the war as a way of addressing the issue of the uneven development in the country (Johnson 2003, 71).

In September, Nimeiri imposed his authority even greater and enacted *sharia law* for the whole of Sudan. *Sharia* is a harsh Islamic legal system in which crimes such as theft, adultery, and murder were judged and punished by limb amputation, according to the Koran. Alcohol and gambling were banned as well (O'Ballance 2000, 131). Not only did southern Sudanese not want to be subjected to a penal code from a religion of which they were not participants, they viewed *sharia law* as yet another example of northern dominance over their southern countrymen (An-Na'im 1993, 113). Between Nimeiri's *sharia law*, the coopting of natural resources, and the re-division of the Southern Region, the SPLA began 1984 with a series of effectively disruptive ambushes.

Much of 1984 was marked by the SPLA engaging a form of "hit-and-run" tactic on army outposts and police garrisons, as well the Bentiu oil fields and the Jonglei Canal project. It was during this time that conflict between Anyanya II and SPLA began to rise (Johnson 2003, 198). In 1985, Nimeiri began a new tactic of his as well, by arming the Baqqara to fight the SPLA in



Map 8: States and Cities, Sudan and southern Sudan

the Nuba Mountains. The *murahalin*, as this armed militia was named, began their arbitrary killing of innocent civilians with persistent raids on villages where the SPLA was known to recruit (Johnson 2003, 199). By April 1985, all of Nimeiri's strategies had proven inadequate regarding military, social, economic, and religious issues and he was ousted as the leader of Sudan. The interim co-civilian/military administration that controlled Sudan in Nimeiri's absence did not appease the rebel movement in the south and in fact the Second Sudanese Civil War intensified.

Continuation and Escalation, 1986 - 1990

Al-Mahdi's regime was largely responsible for escalating the Second Sudanese Civil War by continuing Nimeiri's practice of arming the tribal militias in the south to fight the rebels. This strategy not only engaged war by proxy, but it also allowed the government to perpetuate the idea that the war in the south was, "... a product of internal Southern tribalism, and therefore unrelated to national policies." (Johnson 2003, 69) The Toposa militia of the Juba area was armed by the government to fight the SPLA and in turn, the Boya militia of the eastern Equatoria region was armed by the SPLA to fight the Toposa (Johnson and Prunier 1993, 135).

By 1987 and 1988, the SPLA changed tactics from ambushes and began sieging towns and garrisons for days and weeks at a time in order to gain control of those locations (Johnson 1998, 59). It was not until this time that the SPLA first gained control of northern locations (Maps 58-62). Considerable territory was gained by the rebels, as well as effective strikes on Nile steamers, commercial aircraft, and Sudanese military helicopters (O'Ballance 2000, 160). The *murahalin* raids decreased in late 1987 as well, and friction between the army and the *murahalin* increased. Raids on villages in Darfur and local Nuba and Daju villages in the Nuba Mountains resulted in *murahalin* being fired on by officers who came from those villages (de Waal 1993, 148). By 1989, *murahalin* raids had decreased significantly (de Waal 1993, 148).

Throughout 1989 and 1990, the SPLA continued both tactics of ambush and sieging of the Sudanese military. The military in turn, retake many towns in 1989 and 1990 previously occupied by the SPLA (Johnson 2003, 201). In May 1989, the SPLA declared a ceasefire and peace negotiations between the government of Sudan and the SPLA began (Johnson 2003, 200-201). However, the ceasefire did not last and in June 1989, al-Mahdi was ousted as president by

the current President, Omar Bashir, in Sudan's last *coup d'état*. The new military government under Bashir was unable to end the war and it continued for another fourteen years.

Conclusion of Second Sudanese Civil War, 1991 - 2005

By 1991, the SPLA had controlled most of the southern provinces of Bahr al-Ghazal, Upper Nile, and Equatoria (although Juba and Yei were still under the government of Sudan) (Dean 2000, 80). While there was long history of northern dominance over the south, the inter-communal conflicts of southern tribes in the past are largely neglected and the continued rift in the SPLA threatened to undermine all for which they had fought (Iyob and Khadiagala 2006, 49).

The threat of the SPLA losing ground began in 1985, with the overthrow of Nimeiri. First, with al-Mahdi in power in Khartoum, Gaddafi's personal feud with Nimeiri ended and Libya stopped aiding the SPLA. Also, with a new government in Khartoum and hope for a peaceful solution, Anyanya II switched allegiance away from the SPLA. Finally, with the end of Eritrean Secessionist War in 1991, communist Ethiopia stopped providing the SPLA with sanctuary for its headquarters (Johnson 2003, 202). Also, infighting amongst the factions of the SPLA started in August 1991 with the dominant Dinka, known as the Torit force, and the dissident Nuer, known as the Nasir force (O'Ballance 2000, 172). The SPLA spent a majority of the 1990s trying to mend ties with the different factions that had split from the SPLA since the 1980s (O'Ballance 2000, 176-195).

As was the case in 1972, with a more cohesive SUNA and Anyanya, so too was the SPLM/A in a stronger position in the 2000s to reach an agreement with the government of Sudan (Johnson, H.F. 2011, 17). In 2005, the Comprehensive Peace Agreement (CPA) was signed in

Naivasha, Kenya and a referendum for the independence of South Sudan was scheduled for January 9, 2011 (Johnson, H.F. 2011, 215). After thirty-nine years of war in Sudan's forty-nine years of independence, an independent South Sudan is finally a reality for the southern Sudanese.

Purpose and Expectations

This study offers an analysis of Armed Conflict in Sudan, mainly from January 1980 until December 1990 and will provide context to the beginning of the Second Sudanese Civil War. Most scholars and authors agree that this war technically began in 1983 and resulted in a peace agreement in 2005 that eventually led to the south forming its own country, The Republic of South Sudan, in July 2011. This examination also includes the frequency and locations of six individual Armed Conflict Events, as defined in the Armed Conflict Location and Event Dataset (ACLED) Codebook and will graphically represent the geography of the first eight years of the twenty-two year Second Sudanese Civil War, as well as three years before the start of the war. This aggregated study through disaggregated data can serve as an opportunity to analyze the geography of the beginning of the Second Sudanese Civil War.

I expect the data will show a steady rise in Armed Conflict Events from January 1980 through December 1990. Over time, all three "Battle -" event types and the "Violence Against Civilians" event type are expected to increase in the South, as the "Riots/Protests" event type in the North will as well. Furthermore, I expect in March and April 1985 that there will be an upsurge in the "Riots/Protests" event type. Throughout 1986, the frequency of Violent Events will continue until 1991, when this study's time frame is complete.

When the analysis is complete, I anticipate that this paper will show that most of the Armed Conflict Events from 1980 through 1990 in Sudan were concentrated in the southern

portion of the country, in what is now The Republic of South Sudan. Due to sheer longevity of the Second Sudanese Civil War and the increased rebel control toward the end of the 1980s, I expect that all three Battle event types will be represented in greater numbers, with “Battle- No Change in Location Control” being the most frequent Armed Conflict Event, followed closely by “Battle- Rebels Control Location.” Because Khartoum and its sister-city Omdurman are the largest cities in Sudan (Geonames 2012), I also anticipate to find is the frequency of “Riots/Protests” will be clustered around the capital in the north. I also suspect to find most instances of “Violence Against Civilians” occurring in the north as well, at least from 1980 through 1984, because those years were before the escalation of the war. Overall, I expect to find that the frequency of Armed Conflict Events will increase over the course of the study, as the data from this study is only the first eight years of a twenty-two year conflict.

Methods

This study offers a spatial analysis of the frequency and locations of six types of Armed Conflict Events in Sudan from January 1980 through December 1990 and movement of violent conflict in the early stages of the Second Sudanese Civil War. The research objective is to show in chronological order what, when, and where Armed Conflict Events occurred, to identify the main actors who were involved, and to ascertain the motivation behind each Armed Conflict Event. To achieve this objective, my data organization followed the Armed Conflict Location and Event Dataset (ACLED) Codebook.

In their article, “Introducing ACLED: An Armed Conflict Location and Event Dataset: Special Data Feature,” Clionadh Raleigh, et al. (2010, 651) explained that, “ACLED is a conflict dataset that collects reported information on internal political conflict disaggregated by date, location, and actor” which currently covers fifty countries from 1997 to 2010. Conflict actors in ACLED cover the military and public forces of government, rebel groups and offshoots, militias, and political organizations. Typically two actors were identified with each conflict event, with the individual event as, “the fundamental unit of observation in ACLED” (Raleigh, et al. 2010, 651). Only one event was identified for a specific location on a specific day.

Actors and Events

A total of nine individual events were defined in ACLED, but for the case of Sudan I only identified six: “Riots/Protests,” three different types of “Battle(s) -,” “Violence Against Civilians,” and “Non-Violent Rebel Activity.” “Riots/Protests” was assigned as an event type when either a protest or a riot occurred at a single location. “Rebels Control Location,” “Government Regains Control,” and “No Change in Location Control,” were the three types of

“Battle -” event types assigned when one armed actor was engaged by another armed actor. An additional major event type was “Violence Against Civilians.” This category was assigned when unarmed civilians became engaged with any other armed actor, including “Military Forces,” “Police Forces,” “SPLM/A,” any militias, and “Unknown Armed Group.” The last event type which occurred most infrequent in this study on Sudan was “Non-Violent Rebel Activity.” This category was assigned for occasions such as a hostage or hostages release, headquarter establishment, and a non-violent exchange of territory.

In the case of Sudan, more than eight separate actors were included in the dataset from 1980 through 1990. “Military Forces of Sudan (19xx -19yy)” was one major actor defined. Due to the change in leadership in Sudan throughout the 1980s, a year range was parenthetically specified following the actor title to reflect the term of rule for the respective Prime Minister of Sudan during that year range. “Police Forces of Sudan (19xx-19yy)” were also defined as a major actor and distinct from “Military Forces of Sudan (19xx -19yy).” On the opposite side of the conflict, the “Sudan People’s Liberation Movement (SPLM)” and the “Sudan People’s Liberation Army (SPLA)” were grouped into one actor, “Sudan People’s Liberation Movement/Army (SPLM/A).” A parenthetically specified year range was not applicable in the case of “SPLM/A” because leadership never changed in the SPLA throughout the 1980s.

Another named actor in this study was “Civilians (zzz).” “Civilians (zzz)” were included as an unarmed actor separate from the armed actors, with their country of origin parenthetically specified. If civilians took part in an organized public demonstration, they were then identified as “Protestors” and typically no second actor was identified. If the demonstrations became violent or destructive, the civilians were then defined as “Rioters” and a second actor was also identified. Any rebel offshoots, such as “Anyanya II,” as well as militia groups both domestic

and foreign, were also included as actors. A final actor included in this analysis was “Unknown Armed Group.” This title was given to those groups that were not specifically identified in the collected conflict report, but were responsible for violence at a specific location on a specific date.

Data Acquisition

Four sources were used in collecting the data for ACLED. The main source came from newspaper articles archived within the LexisNexis database. By using “Sudan” in the headline as lead search term, with “attack,” “violence,” “protest,” “death,” “kill,” and “torture” appearing anywhere within an article, I was able to net 4,839 articles from 1980 through 1990. I applied those same search terms in Factiva database, which netted 4,867 more articles, but I only coded for those events that were not gathered by the LexisNexis search or if new information was gleaned from an article for a previously coded event.

From those articles, I only coded for those events that fit the parameters defined by ACLED. If a location was given in the article and I could find the latitude and longitude of that location, I would assign a Geo-Precision number of one. If I could find the latitude and longitude of the location, but I was not certain that the location specified in the news article was the same, I assigned a Geo-Precision number of two. If only a broad region of the country was given in the article, such as “eastern Sudan” or “Equatoria,” I assigned a Geo-Precision number of three. I treated dates of events with the same Precision technique as locations of events.

If I was certain of the date of the event, as per the article, I assigned a Time Precision number of one. If I was certain that the event happened within a week, I set the Event Date as the previous Monday and assigned a Time Precision number of two. If I knew that an event had

occurred within a given month, but uncertain as to when, I set the Event Date as the 15th of that month and assigned a Time Precision number of three. If an article was too vague or gave too little information, then I did not code for that article and that event was ignored. For example, if an article claimed an attack but gave no location other than “southern Sudan,” gave no date closer than, “last month,” and gave no clear indication on who the specific actors involved in that attack, that article was not coded. To be certain that I had not missed a violent event, I researched *Africa Research Bulletin* as well as *Africa Contemporary Record*. These two journals compiled all notable events in Africa, country-by-country, year-by-year.

Once all the information was disaggregated from the news articles and entered into an Excel spreadsheet, I converted that data into a Comma Separated Version (.csv) format to enable ArcMap, a Geographic Information System (GIS) program, to read it. I then downloaded GIS data of the borders of Sudan and neighboring countries from the DIVA-GIS website and added that data to ArcMap as a base map. I also added the .csv data to ArcMap separated by year, and then by event type. From there I represented the frequency of events by location in graduated circles, with different colors denoting different event types. In order to make the graphics more esthetic, I assigned a Natural Breaks (Jenks) classification to the graduated circles and let ArcMap automatically set the number of classes.

Results and Analysis

The expected outcome from this study was that most of the Armed Conflict Events from January 1980 through December 1990 in Sudan would be concentrated in the southern portion of the country, in what is now The Republic of South Sudan. I also expected that all three battle event types would be represented in the greatest numbers, with “Battle - No Change in Location

Control” having occurred the most frequent, followed closely by “Battle - Rebels Control Location.” Expectations were that “Non-Violent Rebel Activity” would be the least frequently occurring event type. Additionally, the highest frequency of “Riots/Protests” event type was expected to be clustered around Sudan’s capital, Khartoum, in the north, as well as most instances of “Violence Against Civilians.” Overall, it was expected that the frequency of all Armed Conflict Events would steadily increase, with a sharp rise in events after 1983 and increasing every year thereafter over the course of the study.

There were 1269 separate Armed Conflict Events coded for Sudan from January 1980 through December 1990. When all Armed Conflict Events were demonstrated in a column chart, the data resembled a skewed bell-curve and showed a declining number of events after 1987 (Figure 1). There was a spike in events after 1983, but that spike did not occur until 1985 - more than a year after the start of the Second Sudanese Civil War. The reason for this first dramatic increase in events was due to a major SPLA offensive in the Upper Nile region that began in December 1984 and spread to both the Bahr al-Ghazal and Equatoria regions by February 1985 (Figure 4). Also, the number of widespread Sudanese protests against Nimeiri increased at the end of March 1985 and continued until his eventual ouster during the first week of April. A second rise in events were attributed to another SPLA offensive that began in June 1986 to coincide with general elections, tapered off, then rose again dramatically throughout 1987 (Figure 4). A reason for this second rise is that after four years of civil war, worldwide reporting increased as well.

The number of Armed Conflicts increased every year and peaked in 1987 with 297 events, but from 1988 through 1990, the number of events decreased by about sixty-two percent. Six hundred sixty-two separate “Battle - No Change in Location Control” events were identified

in over half of all Armed Conflict Events coded (Figure 2). The next two most frequent events to have occurred, almost equally, were “Riots/Protests,” (209) and “Violence Against Civilians” (205). The final Armed Conflict Events, “Battle - Rebels Control Location,” “Battle - Government Regains Control,” and “Non-Violent Rebel Activity,” occurred with a combined frequency of only 193 occurrences. Although another coup would occur in 1989 and the Second Sudanese Civil War would last another fifteen years after 1990, the data showed a slight decline in events from 1988 through 1990 (Figure 1).



Figure 1: All Armed Conflict Events by Year 1980-1990, Sudan

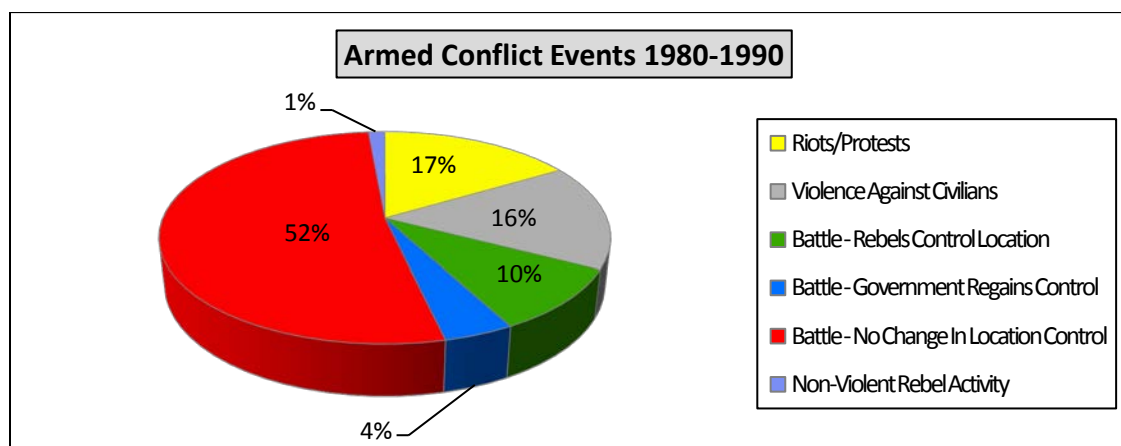


Figure 2: Armed Conflict Events by Event Type 1980-1990, Sudan

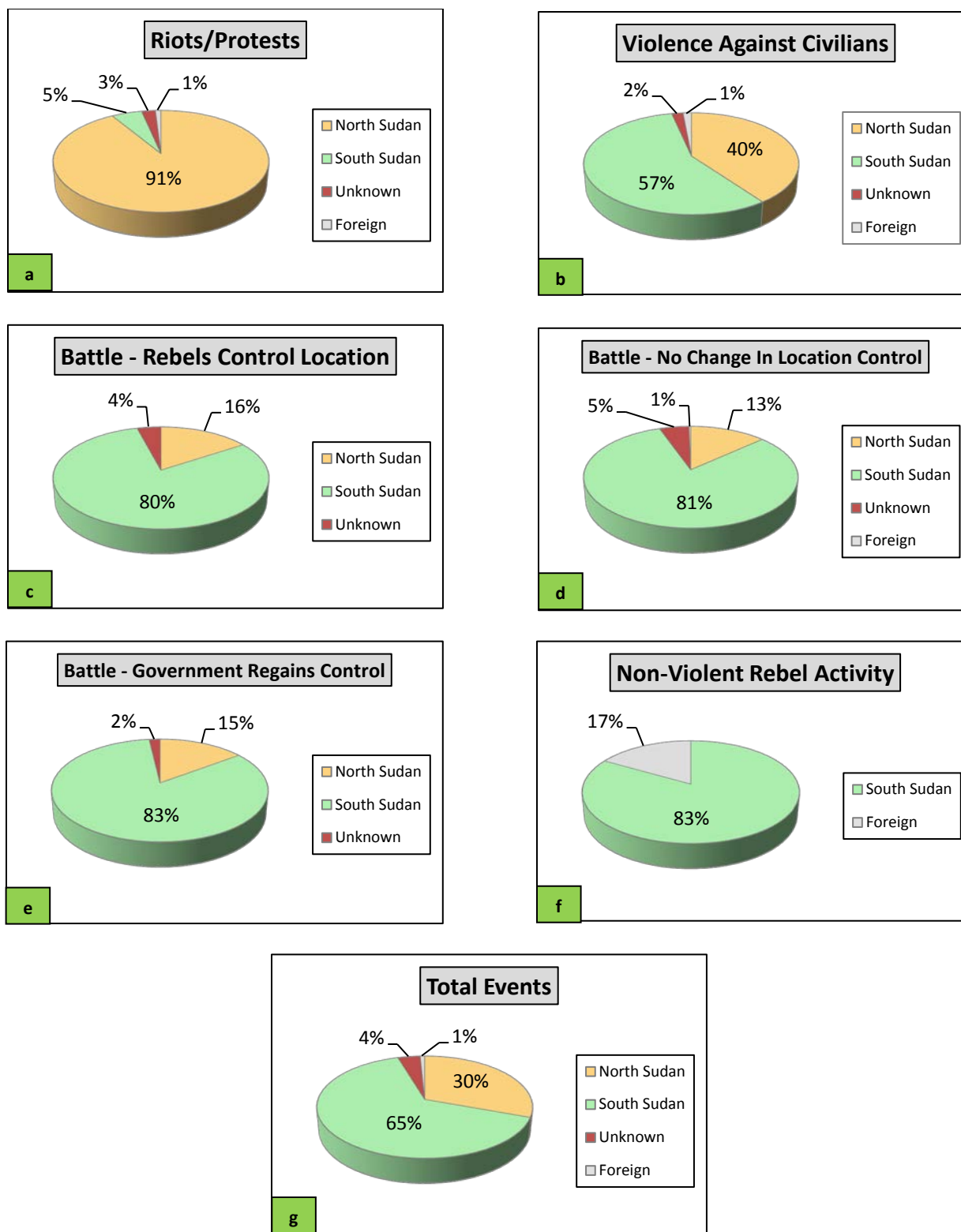


Figure 3: Distribution of All Armed Conflict Events 1980-1990, Sudan

Five out of the six Armed Conflict Event Types occurred most frequently in the South, with “Riots/Protests” as the only event to have occurred more often in the North (Figure 3a). All three “Battle” types occurred more frequently (837) than any other violent event and again, occurred more often in the South than in the North (Figure 3c, 3d, 3e). Because the Second Sudanese Civil War was a southern uprising, the results were as expected in that all three “Battle” types occurred more frequently than any other violent event and more frequently in the South than in the North. Events which occurred in neighboring countries (Egypt, Ethiopia, Kenya, Uganda, Chad, and Libya), were combined into one category, defined as “Foreign.” The only “Battle” type to have occurred outside Sudan’s borders was “No Change in Location Control” (Figure 3d). Those events that occurred in an unspecified location, but still within Sudan’s borders, were defined as “Unknown.”

“Non-Violent Rebel Activity” was the only event type to have a specific location identified in all eighteen occurrences. Also, of the “Non-Violent Rebel Activity” events, not one non-violent rebel activity occurred in the North. All “Non-Violent Rebel Activity” occurred in the South or on foreign soil (Figure 3f). As Figure 3g demonstrated, the uneven distribution of violent events between the north and south was consistent with the data as the SPLA tried to “liberate” southern towns from the centralized government of Sudan in Khartoum in the north. While the frequency of “Non-Violent Rebel Activity” was expected, the locations were unexpected, with Uganda and Ethiopia involved in non-violence even as their own civil wars progressed. When each event type was represented separately, according to year, several spikes in the number of events were evident. Because the Second Sudanese Civil War did not technically begin until 1983, “Non-Violent Rebel Activity” did not occur until March and October 1984 (Figure 6a). All “Non-Violent Rebel Activity” that occurred in both 1984 and

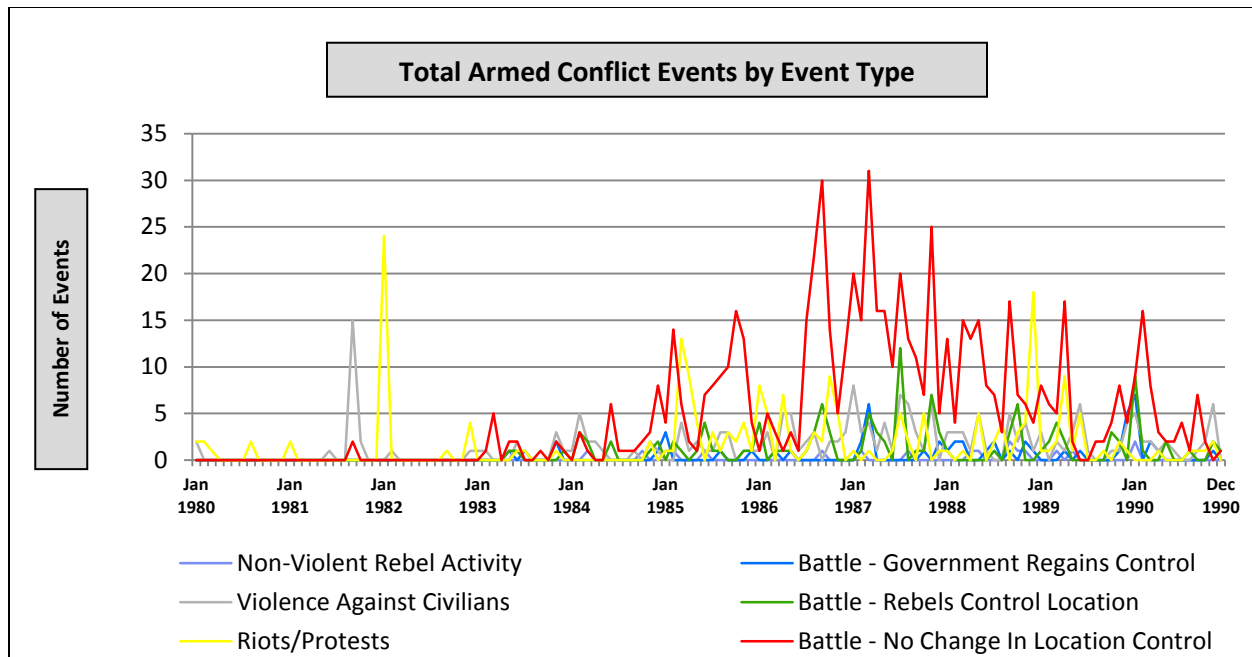


Figure 4: Armed Conflict Events by Event Type and by Month January 1980-December 1990, Sudan

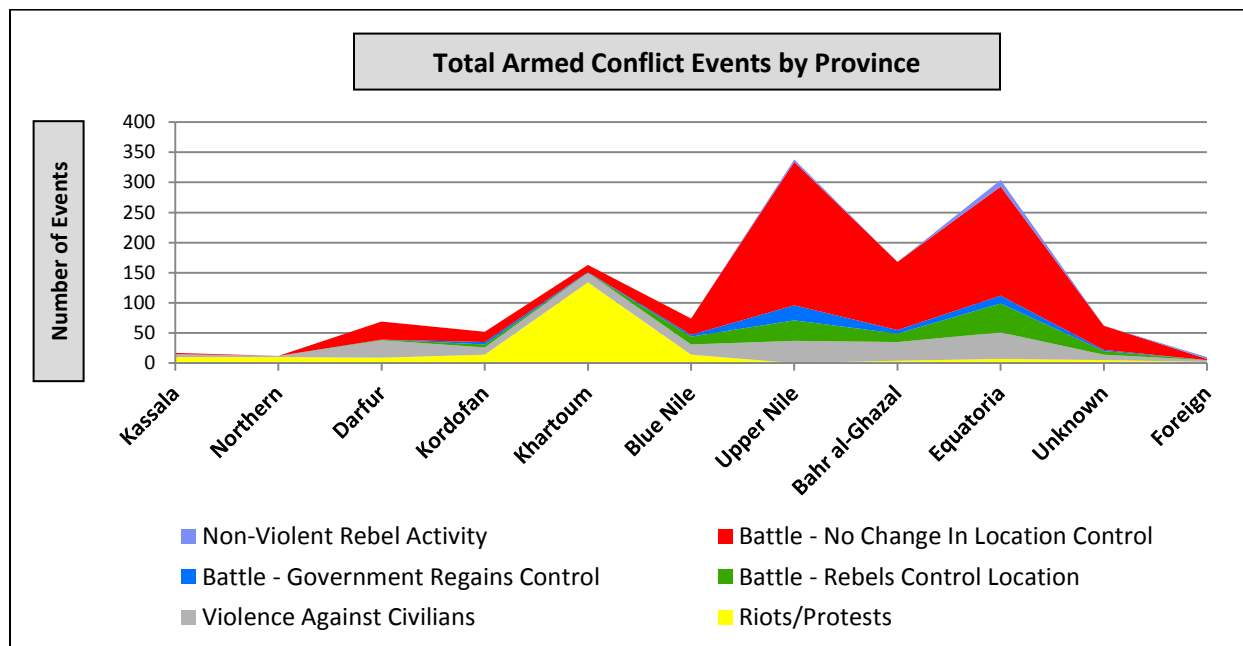


Figure 5: Armed Conflict Events by Event Type and by Province 1980-1990, Sudan

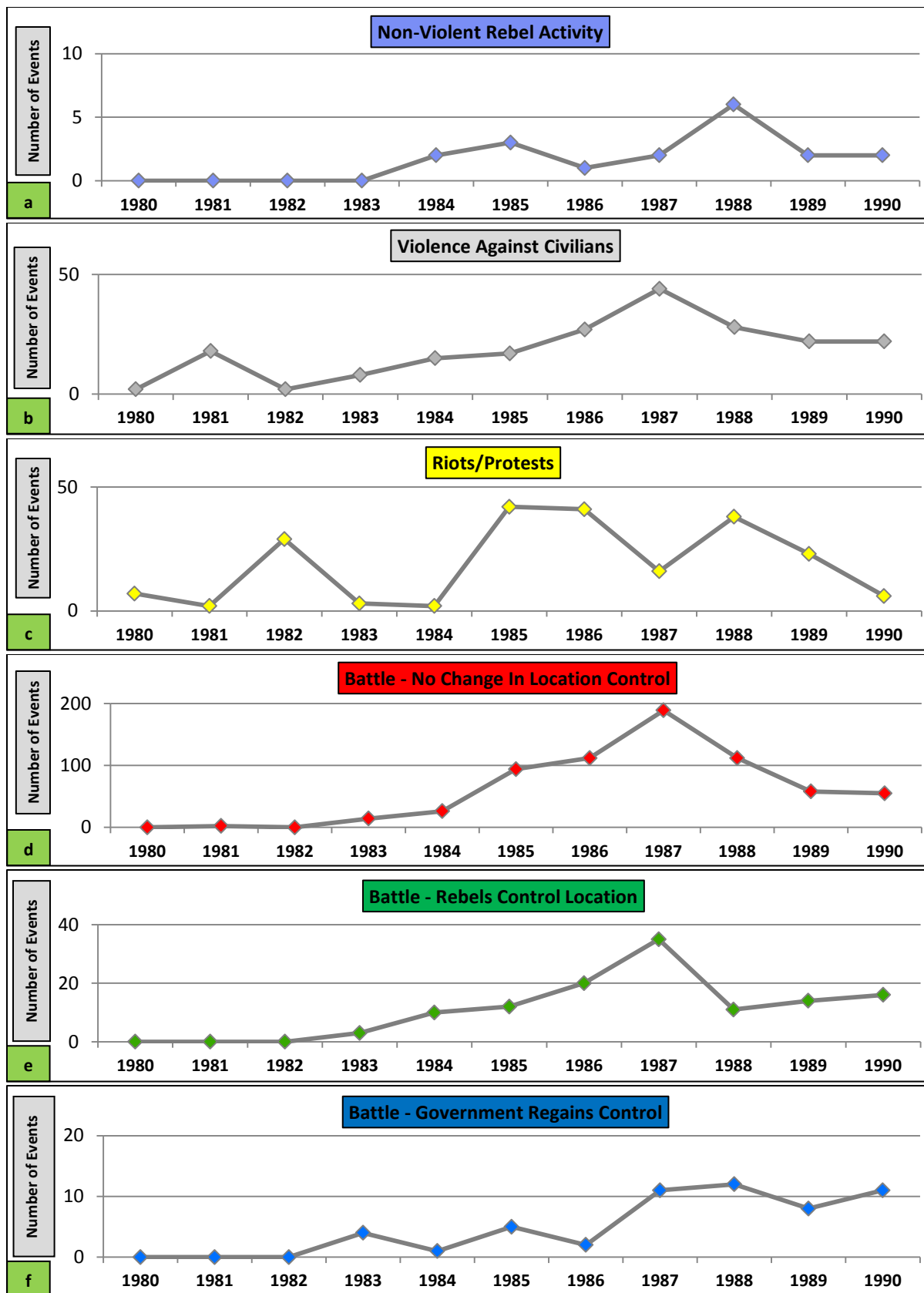


Figure 6: Armed Conflict Events by Event Type and by Year 1980-1990, Sudan

January, February, and June 1985 were attributed to the SPLA releasing hostages kidnapped from previous guerilla attacks. The spike in 1988 of “Non-Violent rebel Activity” events was due to the SPLA detonating explosives on various bridges in south Sudan where no death or injuries occurred.

When all Armed Conflict Events were displayed by Event Type for every month from January 1980 through December 1990, dramatic increases in different event types throughout the 1980s were evident (Figure 4). “Riots/Protests” spiked around January 1982, March-April 1985, and again in December 1988 (Figure 6c). Also, “Riots/Protests” was the only Armed Conflict Event to decrease from 1986 to 1987. The reasons for the large spike in “Riots/Protests” in January 1982 were twofold (Figure 6c). One, they coincided with IMF-imposed austerity measures that increased the price of sugar and other commodities. Two, Nimeiri announced his plan to divide the semi-autonomous Southern Region into smaller states, negating the Addis Ababa Agreement, thus planting the seeds for the Second Sudanese Civil War. The *coup d'état* that ousted Gafaar Nimeiri in April 1985 is represented by a large increase in the number of “Riots/Protests.” The continued level of riots and protests in Sudan in 1986 were attributed to the rise in prices of consumer goods, shortages of power and water supplies, the shortage of food amidst a deepening famine crisis, and Sudanese angry over the United States’ air raids on Libya. By 1988, riots and protests continued as Sudanese became frustrated with the new government’s inability to stop the civil war, the continued rise in the prices of consumer goods, and the continued decrease in the availability of food. By June 1989, a second *coup* in four years ousted Prime Minister Sadiq al-Mahdi.

“Violence Against Civilians” spiked in January 1981 and over the course of 1987 (Figure 6b). The rise in “Violence Against Civilians” in September 1981 had little to do with

conflict within Sudan, as Libyan aircraft bombed suspected Chadian rebels based in western Darfur (Figure 6b). However, the continual rise in “Violence Against Civilians” from 1982 until its peak in 1987 was absolutely related to the Second Sudanese Civil War. Once the ethnic militias in southern Sudan and the Darfur states were armed by the central government in Khartoum to help fight the SPLA in 1986, “Violence Against Civilians” increased. Not only were ethnic militias responsible for the increase, but the Military Forces of Sudan and the SPLA themselves were just as responsible.

Although the number of incidences of “Battle - Government Regains Control” spiked in March 1987, the number of incidences in 1988 were steady and increased in frequency from 1987 (Figure 6f). The number of “Battle - No Change in Location Control” events began in September 1981 and steadily rose until it peaked in March 1987 then declined through December 1990 (Figure 6d). “Battle - Rebels Control Location” events also rose steadily until it spiked in July 1987 and again in January 1990 (Figure 6e).

Certain event types were more common in different provinces. Roughly sixty-four percent of all “Riots/Protests” occurred in Khartoum; as expected, more than any other province of Sudan (Figure 5). Over sixty-three percent of “Battle - No Change in Location Control” events occurred in the Upper Nile and Equatoria provinces of south Sudan. The people of Bahr al-Ghazal, the third province comprising the Southern Region of Sudan, experienced the least amount of occurrences of “Battle - No Change in Location Control” event type, with only seventeen percent. The lack of key positions for the rebels to attack and hold in these areas are attributable to these low numbers. In the Darfur region of the North, “Violence Against Civilians” event occurred almost as frequent as its neighbor, Bahr al-Ghazal in the South, with twenty-nine instances coded against thirty-one, respectively. It is in these remote regions that the

murahalin raids reached a peak (Johnson 2003, 199). Once again, the Upper Nile and Equatoria provinces in the South showed the greatest occurrences of “Violence Against Civilians” event type, with a combined frequency of nearly forty percent. “Battle - Rebels Control Location” showed a similar frequency of events in Equatoria and Upper Nile provinces as well, with forty-eight instances coded and thirty-four, respectively.

I separated each state by province to see if one event type occurred more often than another (Figures 10-15). The majority of riots and protests were not clustered around the capital city of Khartoum, but rather widespread throughout the North (Figures 7-11a and 12). Southern Kordofan is the only northern state not to have experienced riots or protests (Figure 11b).

Central Equatoria, Eastern Equatoria, Western Bahr al-Ghazal, and Lakes were the only southern states to experience riots and protests, and they were minimal (Figures 13a, 13b, 13b, and 15d). Central Equatoria and Eastern Equatoria were the only states in all of Sudan to have occurrences of all six Armed Conflict Events (Figures 13a and 13b).

“Battle - Rebels Control Location” event type represented in Maps 54 to 62 exemplifies the SPLA’s main tactic the During the 1980s of hitting an area where previously there had been limited military operations, recruit, train, and return later to recruit further (Johnson 1998, 58). In 1983, the SPLA first started controlling areas in the east, near the Ethiopian border as their headquarters were originally established in Ethiopia (Map 55). In 1984 through 1986, the SPLA moved further into the interior of the Southern Region as they began to solidify control in the south (Maps 56 and 57).

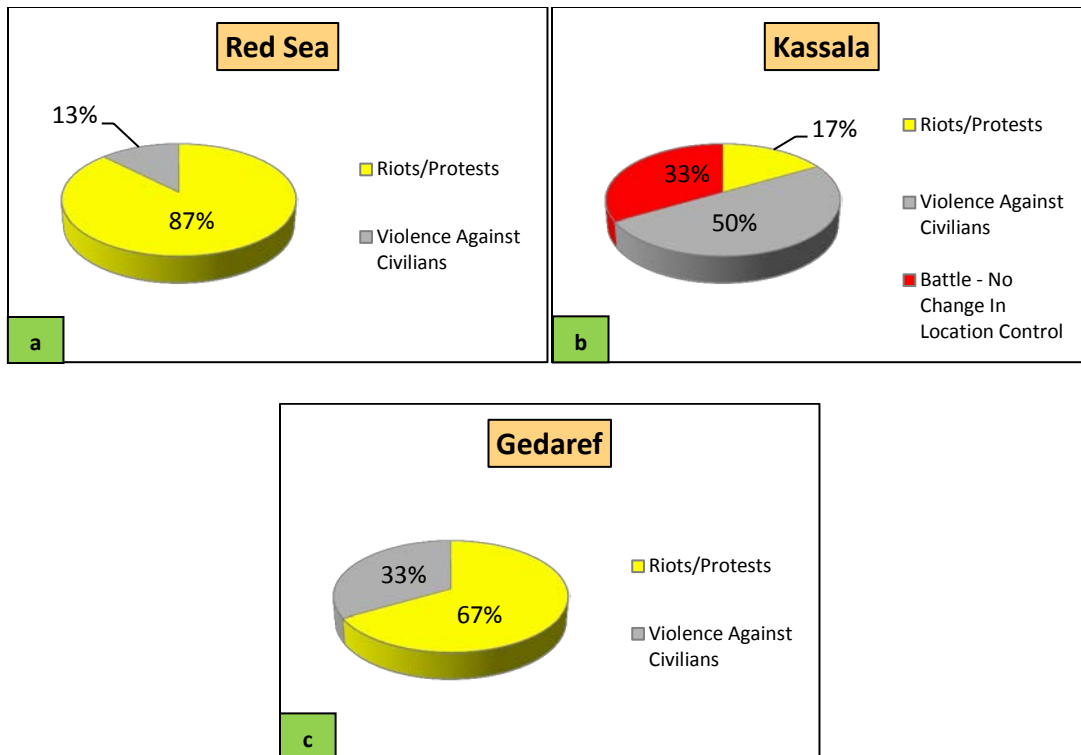


Figure 7: Armed Conflict Events by State, Kassala Province, *North Sudan* 1980-1990

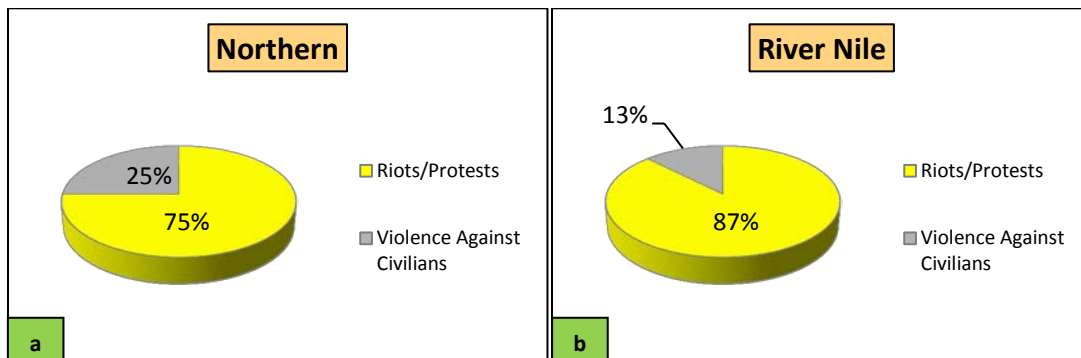


Figure 8: Armed Conflict Events by State, Northern Province, *North Sudan* 1980-1990

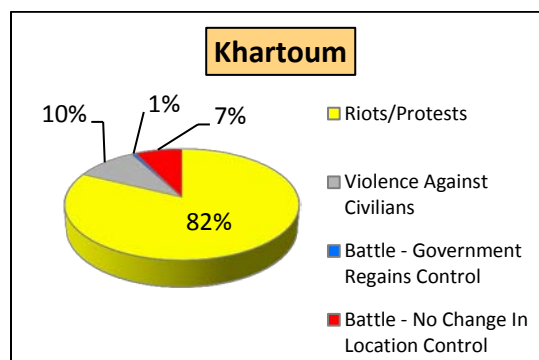


Figure 9: Armed Conflict Events by State, Khartoum Province, *North Sudan* 1980-1990

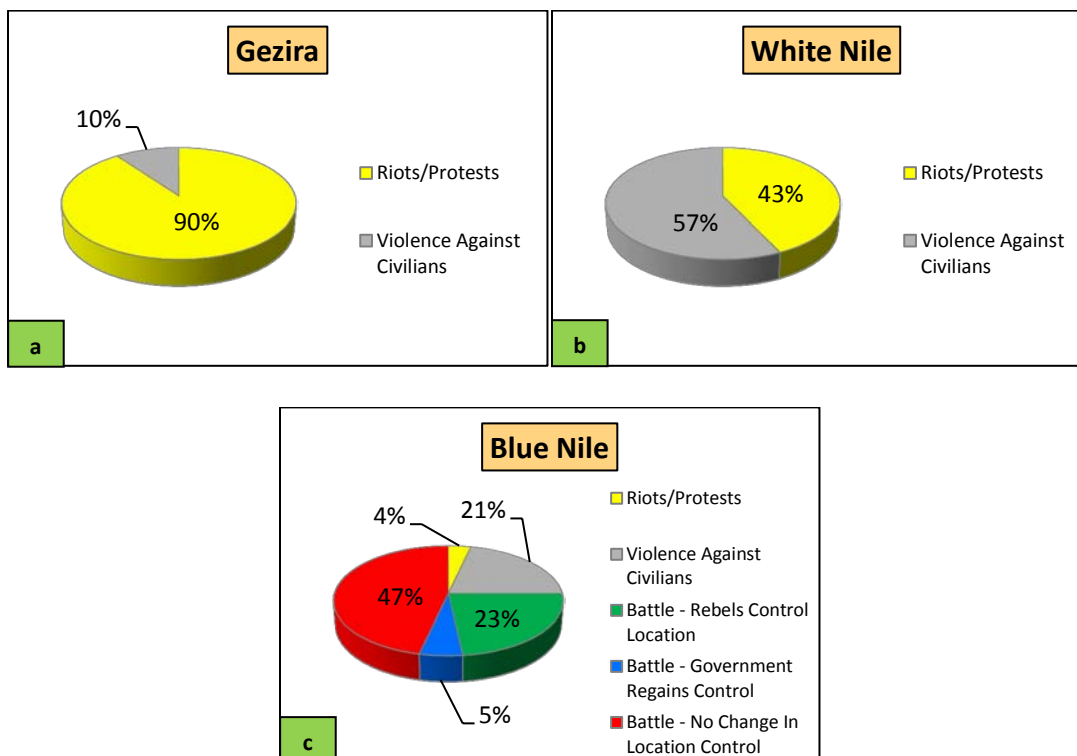


Figure 10: Armed Conflict Events by State, Blue Nile Province, *North Sudan* 1980-1990

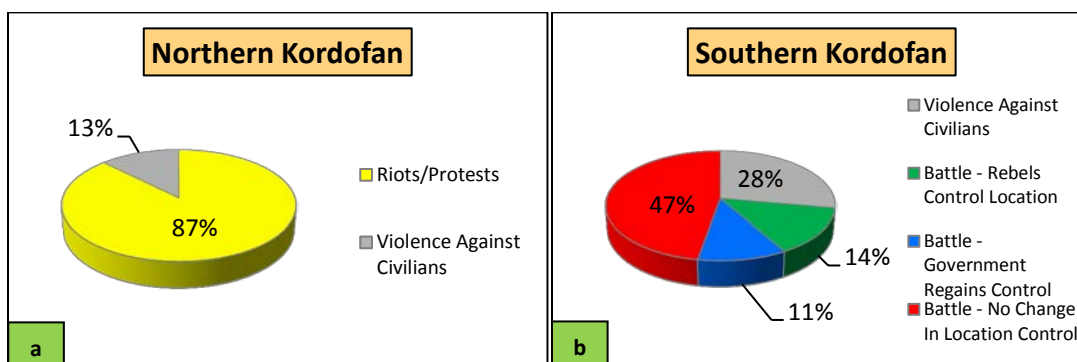


Figure 11: Armed Conflict Events by State, Kordofan Province, *North Sudan* 1980-1990

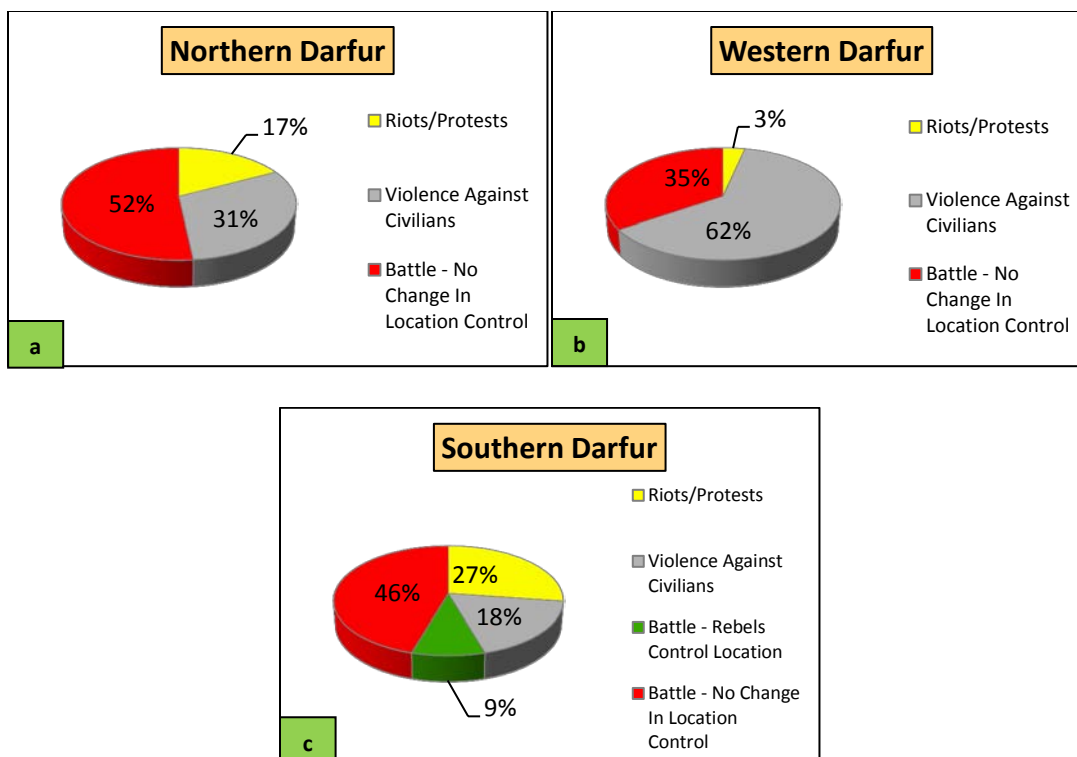


Figure 12: Armed Conflict Events by State, Darfur Province, *North Sudan*

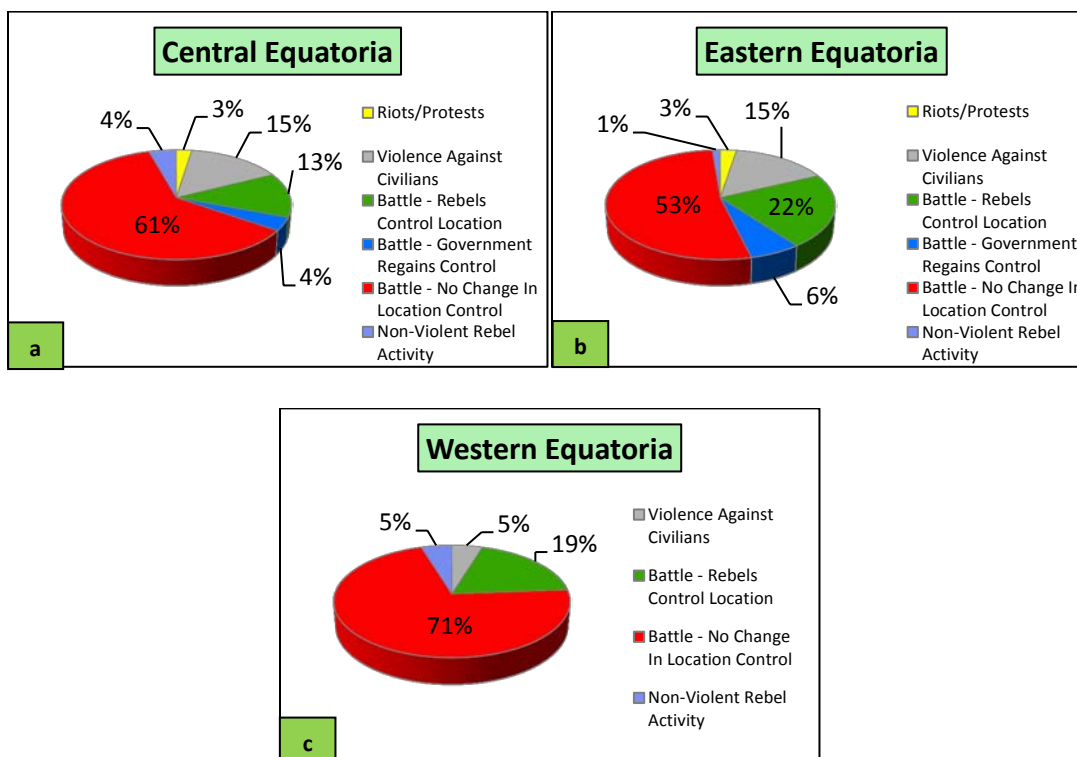


Figure 13: Armed Conflict Events by State, Equatoria Province, *South Sudan*

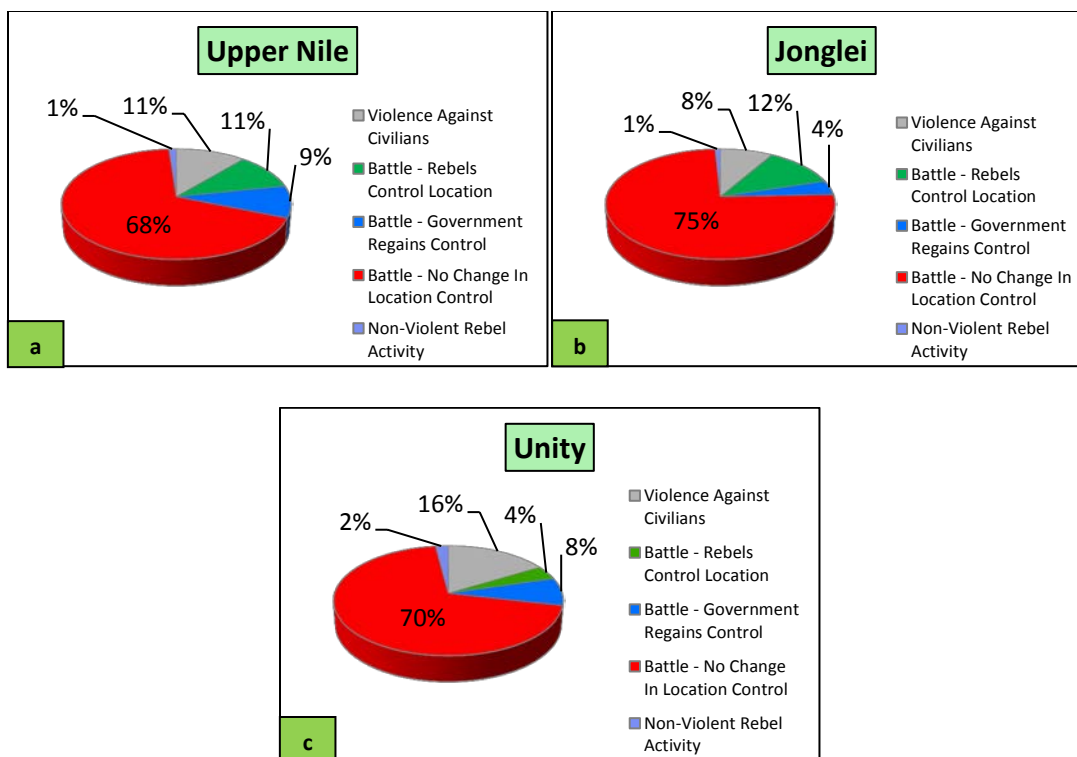


Figure 14: Armed Conflict Events by State, Upper Nile Province, *South Sudan*

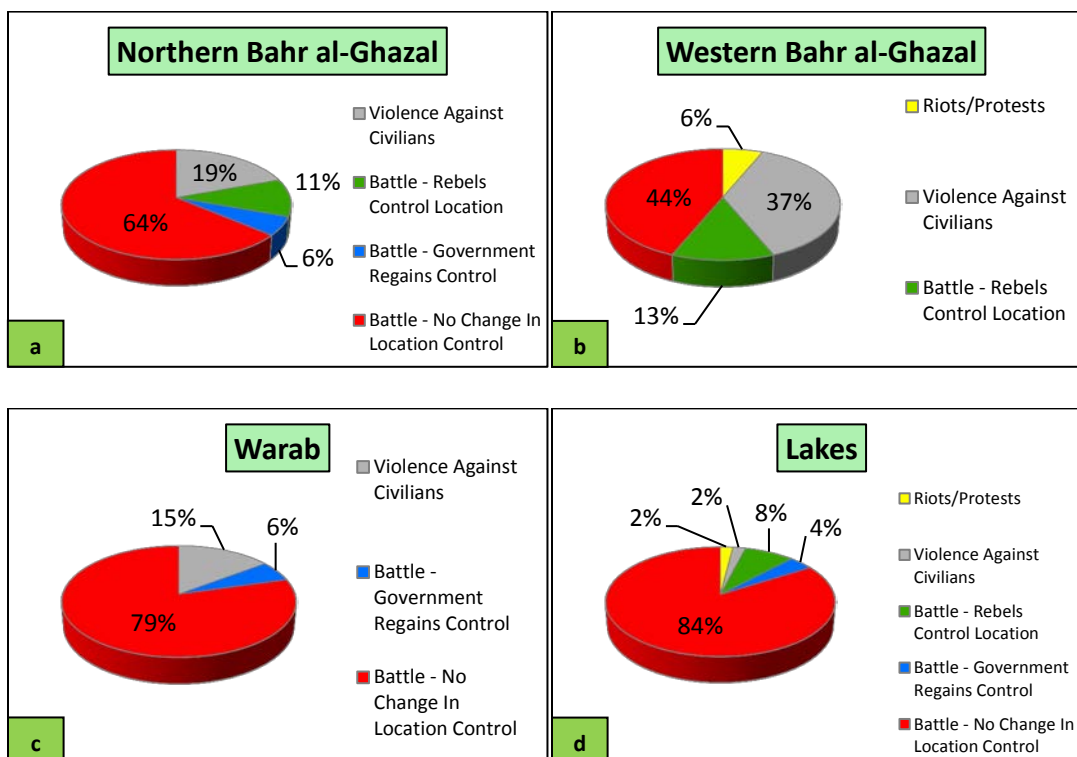


Figure 15: Armed Conflict Events by State, Bahr al-Ghazal Province, *South Sudan*

Warab, in Bahr al-Ghazal province, is the only state in the south that experienced only three different types of Armed Conflict Events (Figure 15c). There were no states in the north to have experienced all Armed Conflict Events, but the Blue Nile border-state experienced all event types except “Non-Violent Rebel Activity” (Figure 10c). Half of the northern states only experienced event types “Riots/Protests” and “Violence Against Civilians” (Figures 7a, 7c, 8, 10a, 10b, and 11a). All four states that comprise Bahr al-Ghazal province had no occurrences of the “Non-Violent Rebel Activity” event.

When I combined all three “Battle(s) -” event types that occurred in the south, ninety-six percent of all Armed Conflict Events in Lakes state were one “Battle -” event type or another (Figure 15d). The state in the south which had the lowest frequency of “Battle(s) -” event type was Western Bahr al-Ghazal, with only fifty-seven percent (Figure 15b). Eight out of ten states in the Southern region experienced between eighty-one and ninety-six percent frequencies of “Battle(s)” out of all Armed Conflict Events that occurred in each state (Figures 13-15).

In the North, when all three “Battle” event types were combined, only the states that share a border with the south recorded a frequency similar to that of the south. Blue Nile state had the highest frequency of seventy-five percent, while Southern Kordofan was close with a seventy-two percent frequency of all events occurred having been at least one “Battle” event type. Half of all the states in the north did not have an occurrence of either of the three “Battle” event types. The remote western province of Darfur is the only northern province to have all its states experience one “Battle -” event type (Figure 12).

Accounting for the Geography and Violence

I isolated each Armed Conflict Event type by year according to its location in ArcMap to observe the unique geographic patterns of violent conflict in Sudan. Although it is widely known that the Second Sudanese Civil War was a southern uprising, the concentration of the violence in the South may not have been as evident until viewed from a geographic perspective. When all Armed Conflict Events from 1980 to 1990 are displayed on a map of Sudan according to their frequency and location, it becomes clear that events in the Central Equatoria as well as Eastern Equatorian provinces were clustered in the south, near the Sudan-Uganda border (Map 9). Additionally, in 1990, the SPLA made a concerted effort to secure Juba in Central Equatoria, the future capital of South Sudan (Johnson 1998, 62), and all three “Battle -” types reflect this as they show a greater frequency of events in and around Juba in Central Equatoria (Maps 53, 62 and 70).

The event type that displayed the most unique pattern was “Riots/Protests.” As mentioned previously, “Riots/Protests” event type occurred with the greatest frequency in the north, but what became clear through ArcMap was that riots or protests were nearly nonexistent in the south after 1986, when the civil war intensified (Maps 29-32). This suggests a certain level of popular support among southern Sudanese for the SPLA. In fact, the consensus would eventually favor secession of the Southern Region from the Republic of Sudan.

The notion of civil wars that develop in the periphery, away from the capital, and tend to last much longer than those that develop close to the nation’s capital was consistent with the data (O’Loughlin and Raleigh, et al. 2007, 12). Sudan had an extremely long twenty-two year civil war that developed in the periphery of Khartoum, namely the Southern Region of Sudan. Reflecting this, all three “Battle -” event types first occurred in the south (Maps 46, 55 and 64).

Additionally, research that showed that mountainous areas tend to favor rebels is also consistent with this data (O'Loughlin and Raleigh 2007, 15). The Nuba Mountains in Southern Kordofan state provided a buffer between north and south Sudan that allowed the rebels to move from one tactical engagement to the next.

Despite foreign interests playing a role in the Second Sudanese Civil War, Armed Conflict Events coded occurred mostly within Sudan's boundaries and clustered near foreign borders only after 1985, when the war intensified (Maps 15-20). Nasir, only twenty-six kilometers from Ethiopia in Upper Nile state, experienced a number of Armed Conflict Events as well as Torit and Kapoeta in Eastern Equatoria state, which sit roughly seventy-five kilometers from Uganda and Kenya, respectively (Map 9). Locations hardest hit steadily by these events throughout the 1980s, such as Juba, Bor, Wau, Bentiu, and Khartoum however, are all between 116 and 442 kilometers from the nearest foreign border. Rarely in this study did conflict spill over into other countries, as is the case with of Africa's internal wars (Keller 1998, 275). Some states in the south saw very little violent activity. The rural areas of Western Bahr al-Ghazal and Western Equatoria, which border the Central African Republic and the Democratic Republic of the Congo to the southwest, experienced relatively few Armed Conflict Events.

There are several factors and weaknesses that may skew the results. The first is that the main references were data culled from newspaper reports from sometimes questionable sources. At times, accounts of atrocities committed by one actor evoked denial by the opposite actor. This study then lent itself to a certain amount of subjectivity when it was essentially one actor's word against another, with no additional independent data available. Another weakness may be its greatest omission: that ACLED analysis and therefore this study did not include famine, or the practice of withholding food as a weapon of war, when analyzing Armed Conflict Events in

Sudan. Finally, another hidden aspect of structural violence and an omission in this study of Armed Conflict Events was that of rape. For various reasons, underreporting these incidents was, and in most places still is, common practice among women and their families. While important, ascertaining voracity on these three dimensions of violence is well beyond the scope of this project.

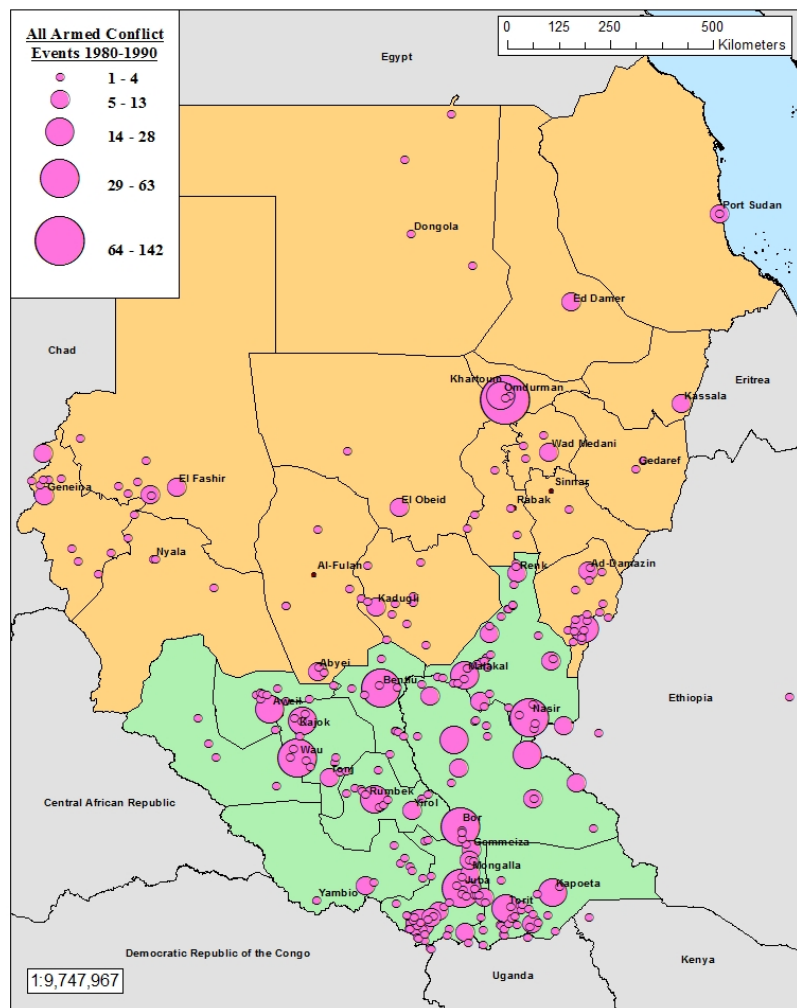
Conclusion

The beginning of the Second Sudanese Civil War was almost entirely internal, despite foreign involvement and some concentration of Armed Conflict Events near the border; rarely did the conflict spill over into neighboring countries. It is quite extraordinary that Sudan's civil war did not become an international war considering the list of armed conflict surrounding Sudan from the 1960s until today: Eritrean Secessionary War, 1965-1991; the Congo Conflict, 1960-1965; the Ugandan Internal Repression, 1971-1979 and the Ugandan Civil War and Insurgency, 1981-Present; Democratic Republic of Congo War, 1998-Present; Eritrean-Ethiopian Border War, 1998-2000; Libyan occupation of Chad and subsequent Chadian rebellion of the 1980s (Jackson 2006, 18).

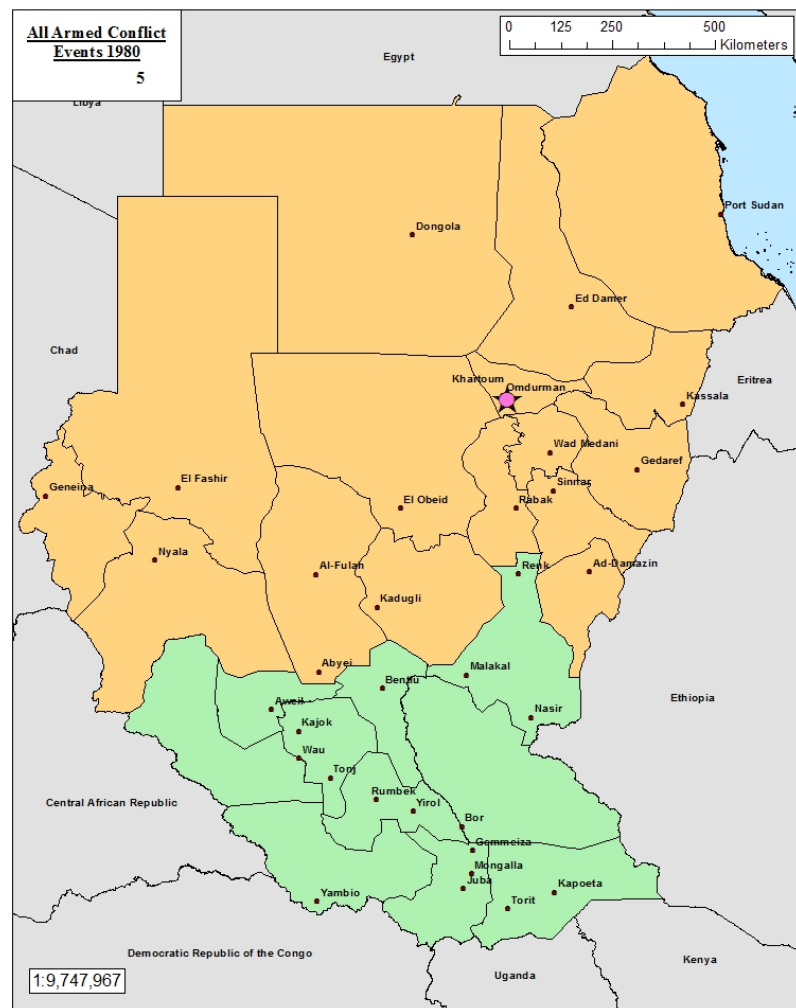
Today, even though the Republic of Sudan and the Republic of South Sudan are independent from one another, conflict is far from settled. There is still border violence over oil deposits in the Abyei area of Southern Kordofan, government-hired ethnic militias in Darfur accused of genocide, and inter-tribal cattle raiding in Jonglei between the Dinka, the Nuer, and the Murle. The ongoing genocide in Darfur has focused the attention of the West to the atrocities in Sudan and with modern technology, a new frontier in human rights is being explored. For the first time ever, through the multi-cooperative of the Satellite Sentinel Project (SSP), communication between those monitoring events on the ground and those monitoring satellites in space allow, in near real-time, the tracking of armies. DigitalGlobe provides the satellites for commercial use, the Harvard Humanitarian Initiative analysis the imagery and ground information, and the Enough Project disseminates the reports to news outlets, social media platforms, and activists (SSP 2012). Another positive step toward a peaceful Sudan region is the recent negotiations that now allow Sudanese and South Sudanese to move freely between nations, reside in either nation, conduct business amongst each other, and buy and sell property

in either country (The Economist 2012). As internal conflict in Sudan and South Sudan continues and evolves, so too does our understanding which may provide a peaceful solution.

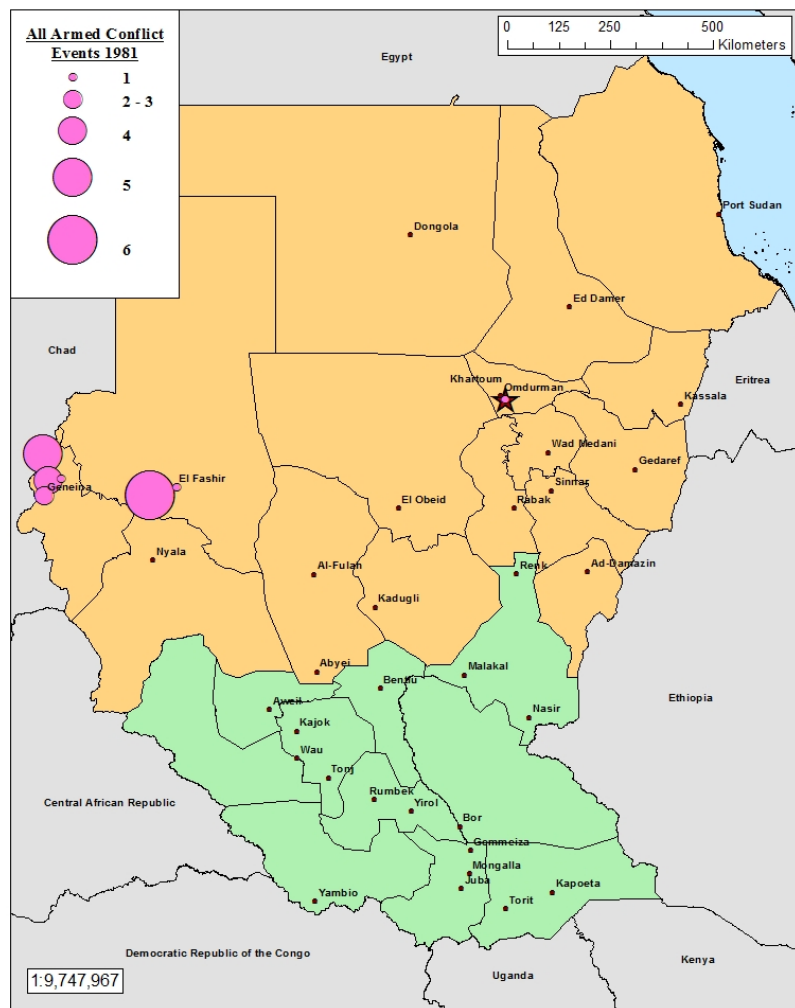
The advantages of a geographic approach to conflict analysis are evident: it clearly shows geographic pattern of violence which can advance understanding of future internal conflict and how it may spread through a country over time. It also shows which areas are strategically most important for rebel groups by noting which towns experienced a higher frequency of battles. Whereas geography incorporates many different fields of study to gain a broader understanding of the world around us, the complexities of violent conflict become more easily comprehended when disaggregated data is combined with the study of an assortment of social sciences.



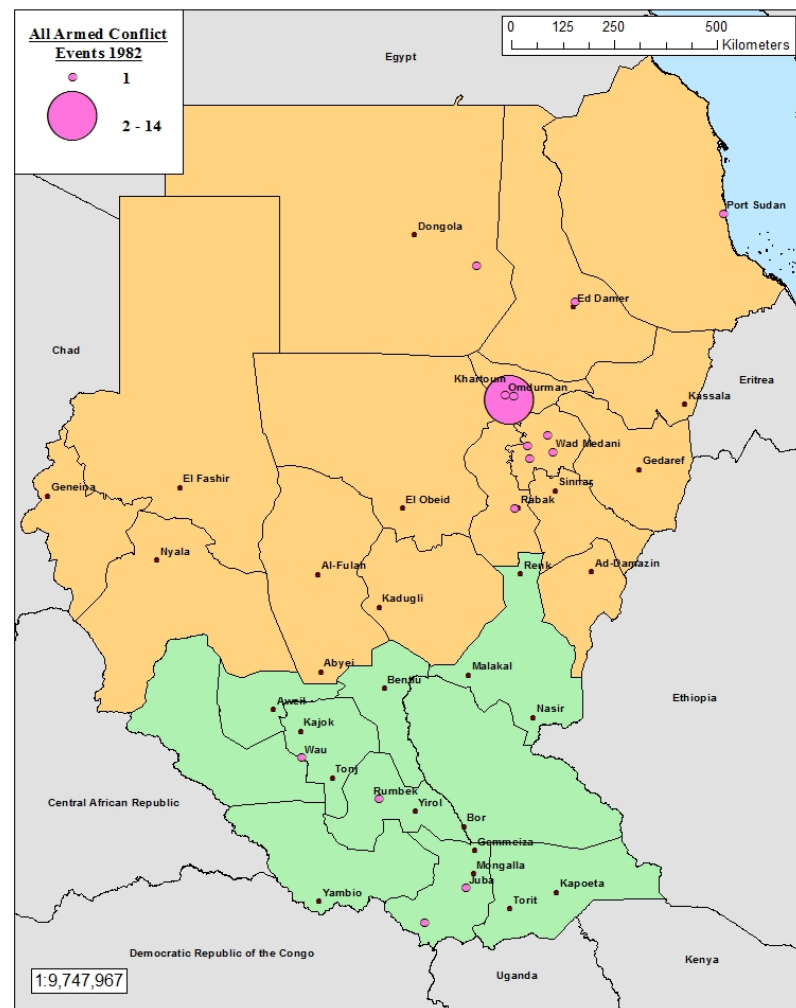
Map 9: All Armed Conflict Events, 1980 - 1990



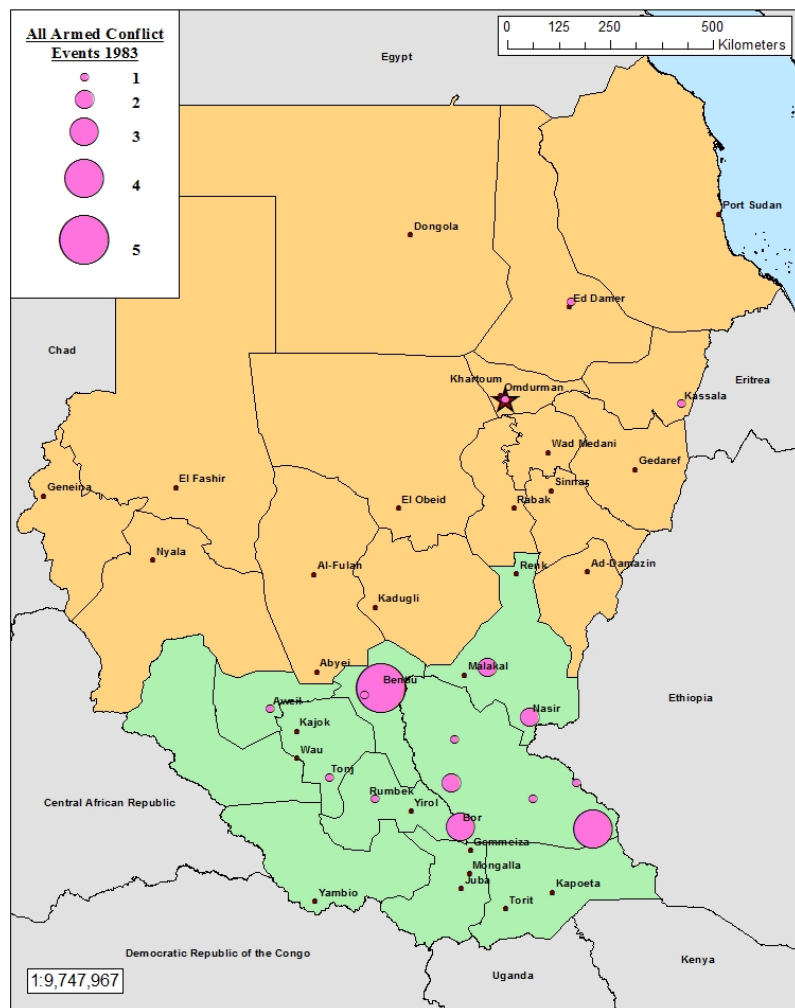
Map 10: All Armed Conflict Events, 1980



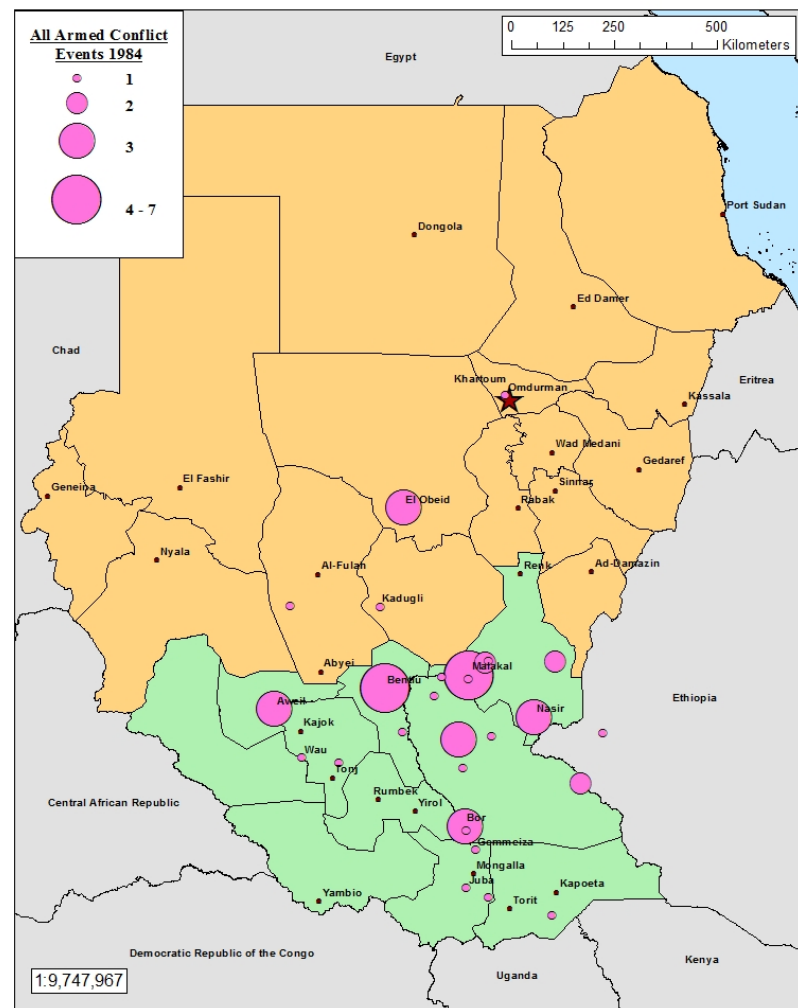
Map 11: All Armed Conflict Events, 1981



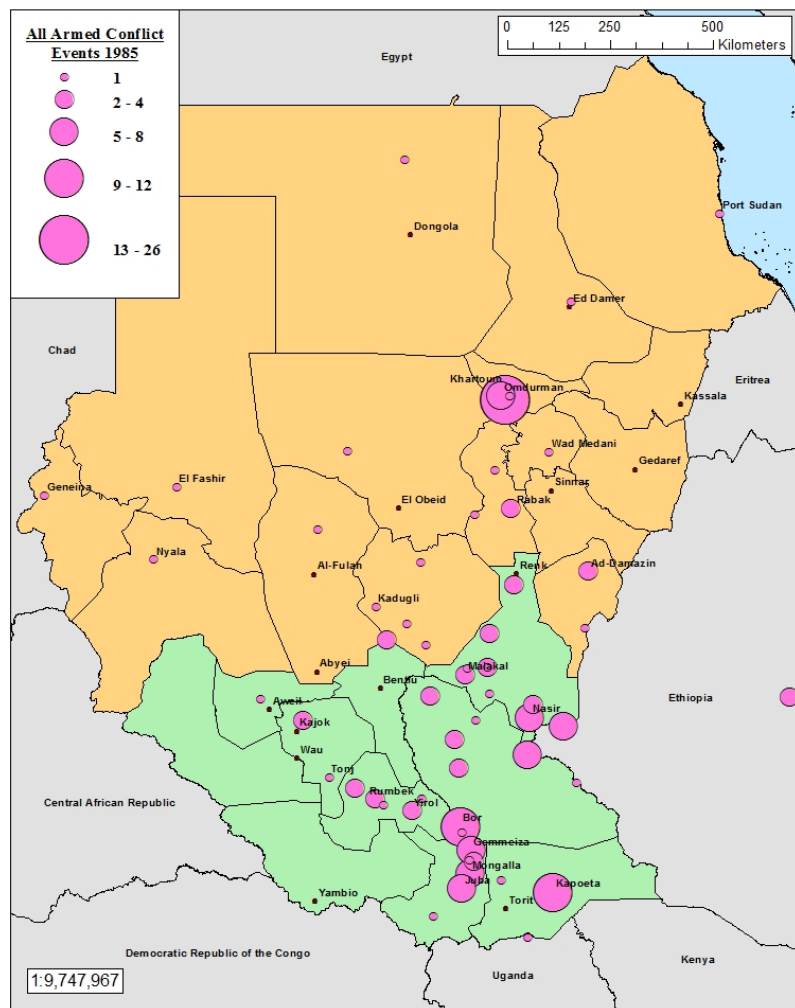
Map 12: All Armed Conflict Events, 1982



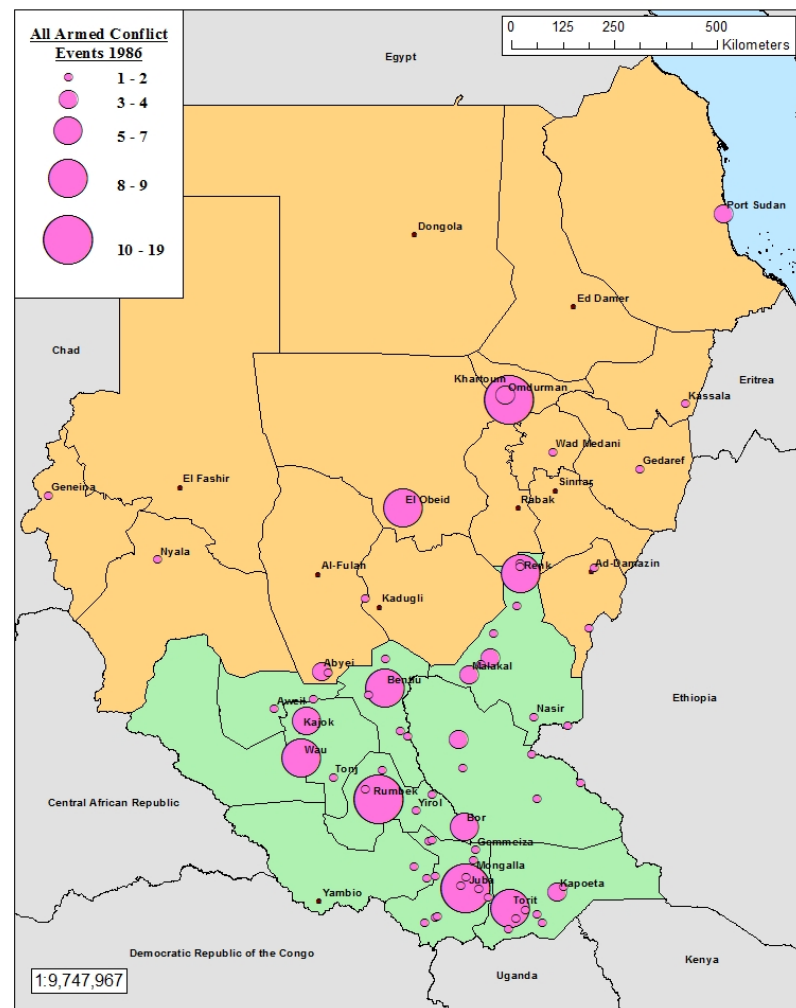
Map 13: All Armed Conflict Events, 1983



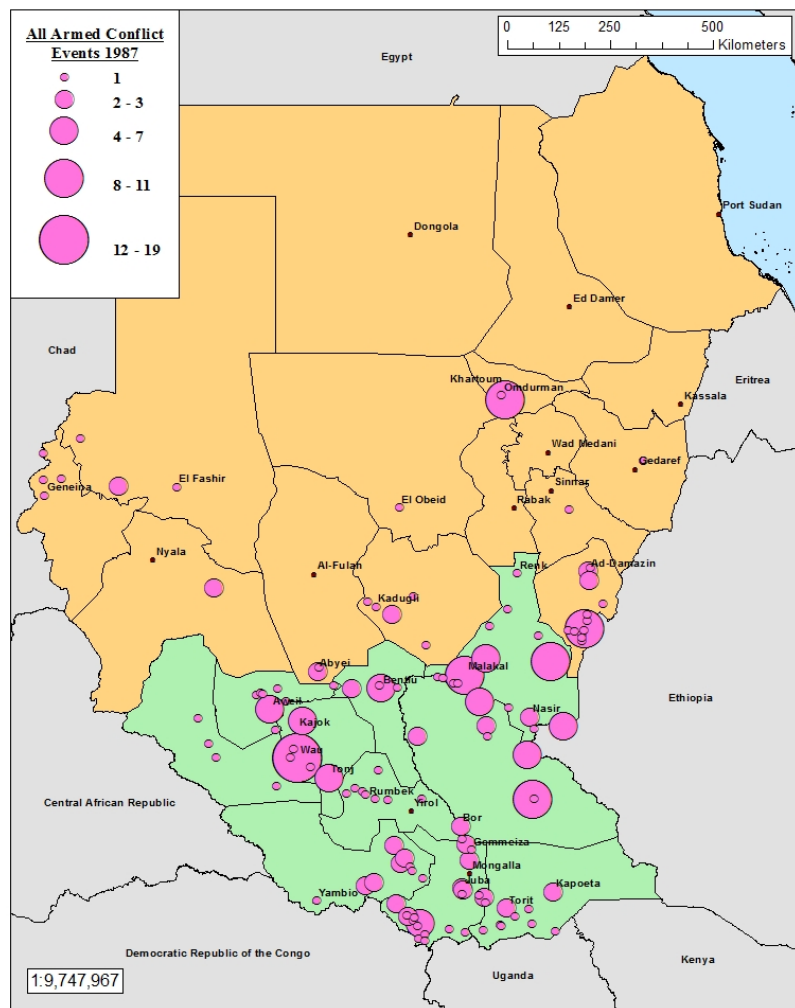
Map 14: All Armed Conflict Events, 1984



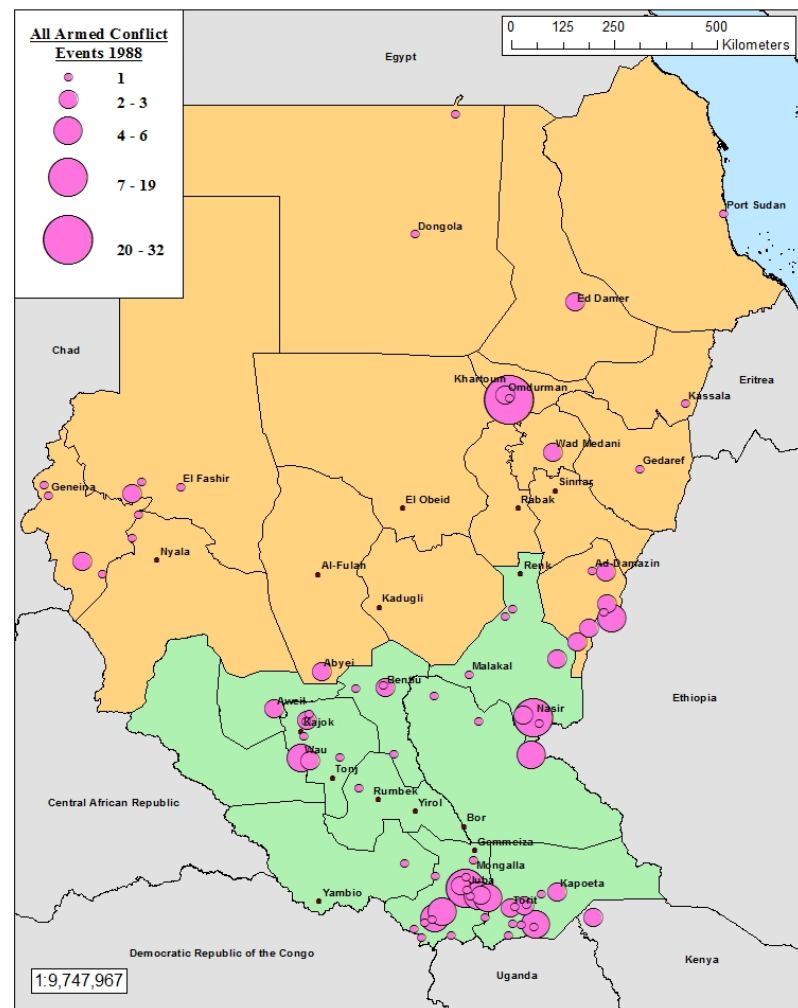
Map 15: All Armed Conflict Events, 1985



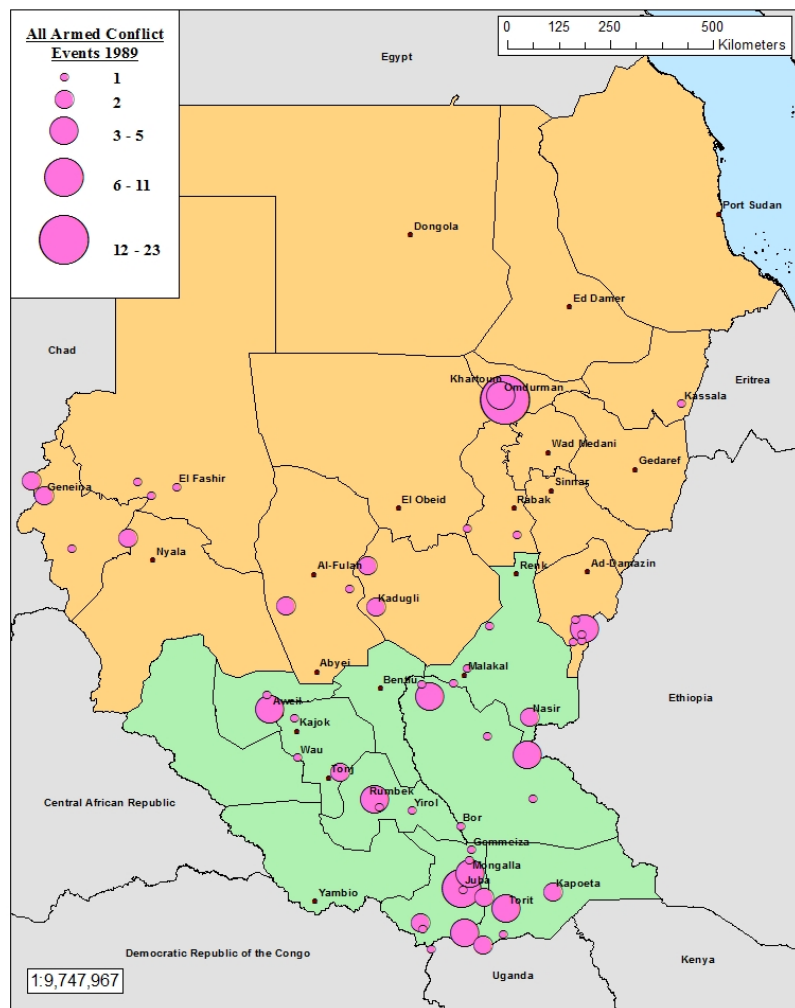
Map 16: All Armed Conflict Events, 1986



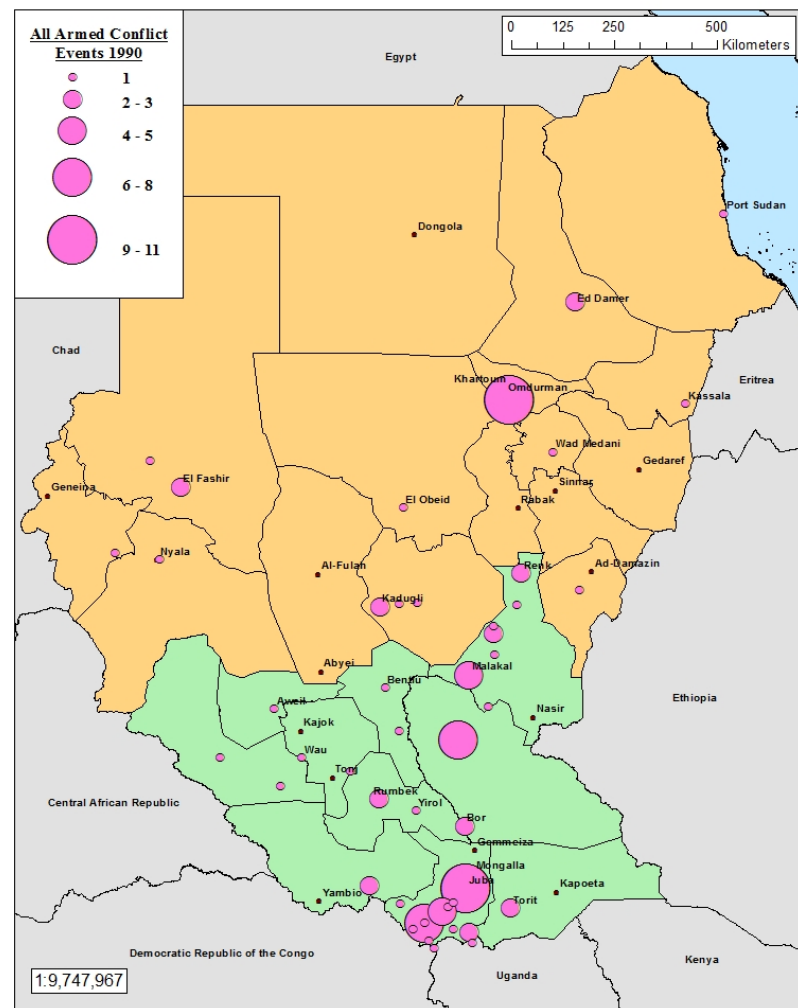
Map 17: All Armed Conflict Events, 1987



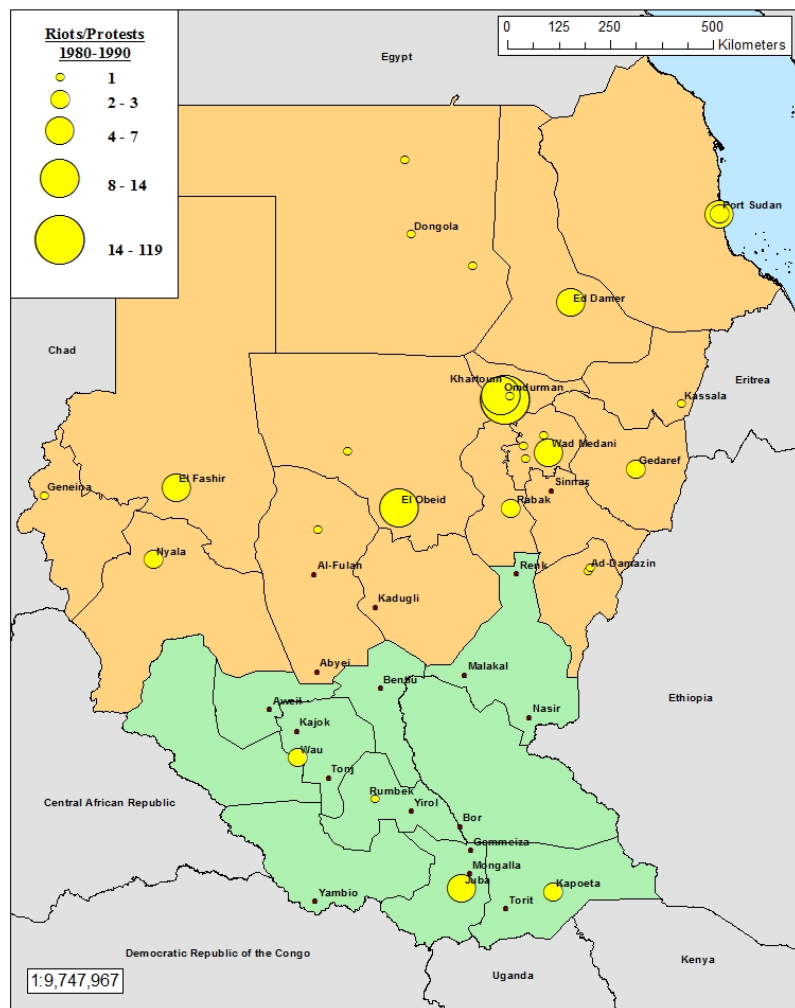
Map 18: All Armed Conflict Events, 1988



Map 19: All Armed Conflict Events, 1989



Map 20: All Armed Conflict Events, 1990



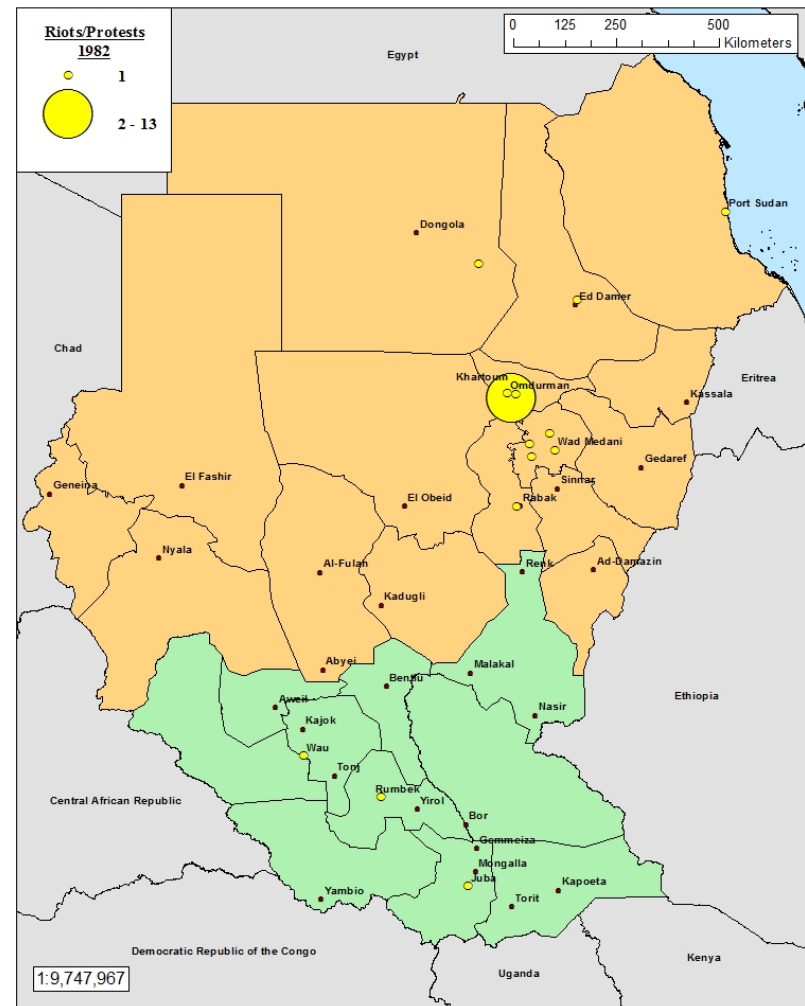
Map 21: All “Riots/Protests,” 1980 - 1990



Map 22: All “Riots/Protests,” 1980



Map 23: All “Riots/Protests,” 1981



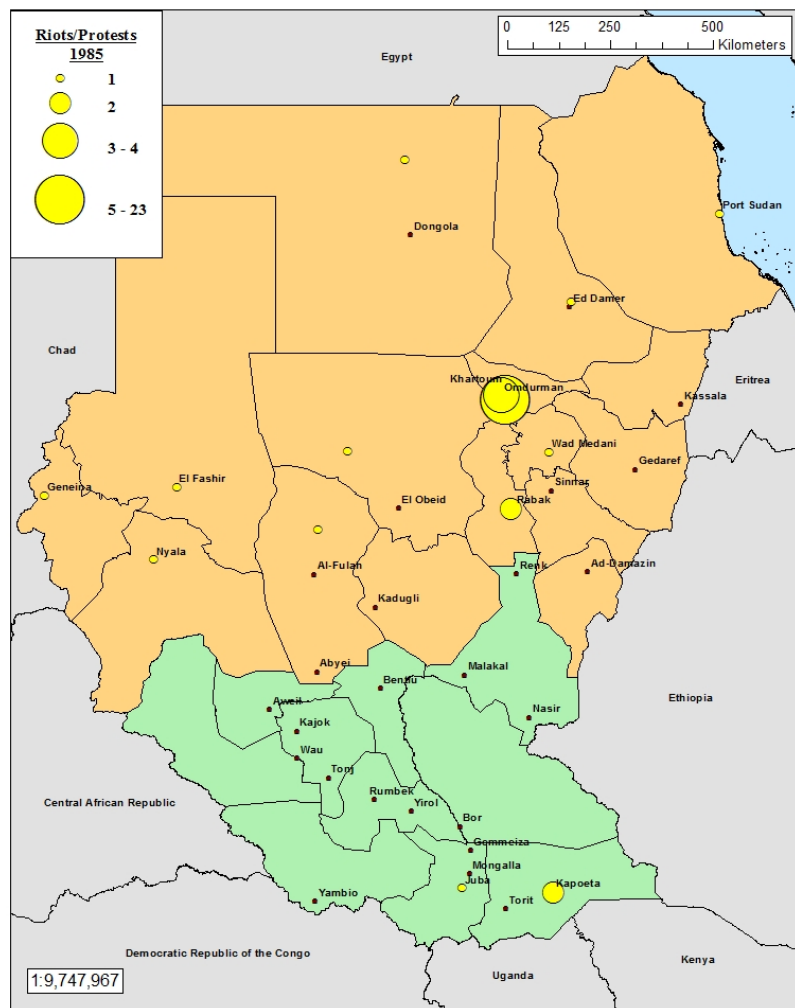
Map 24: All “Riots/Protests,” 1982



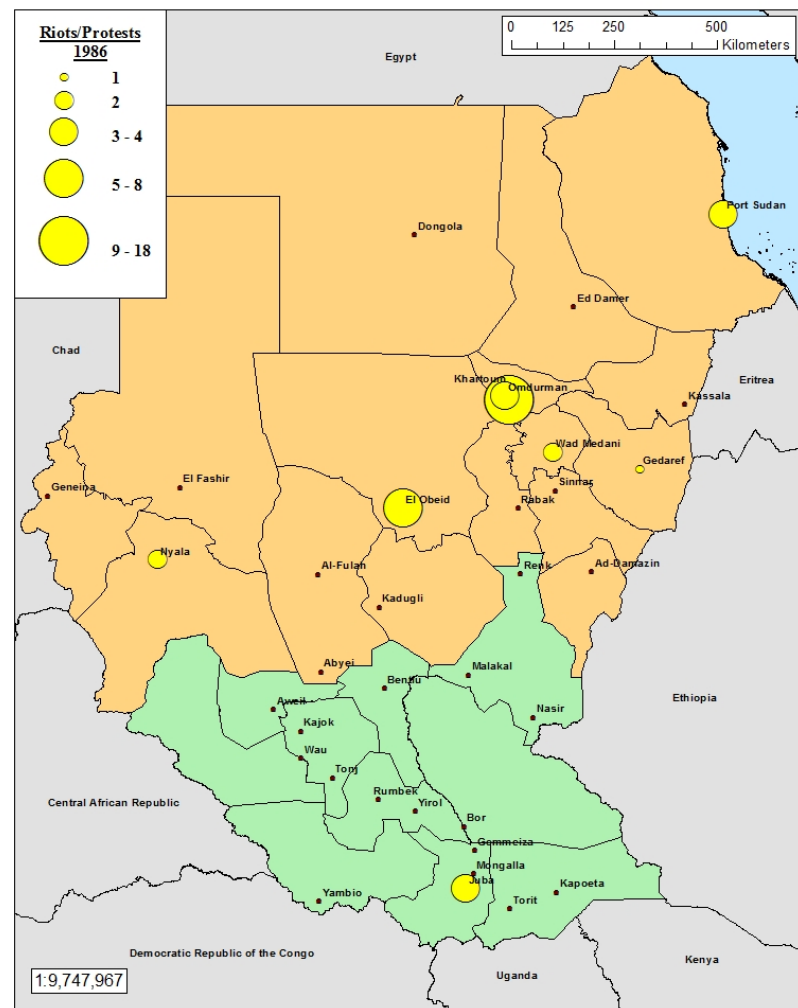
Map 25: All “Riots/Protests,” 1983



Map 26: All “Riots/Protests,” 1984



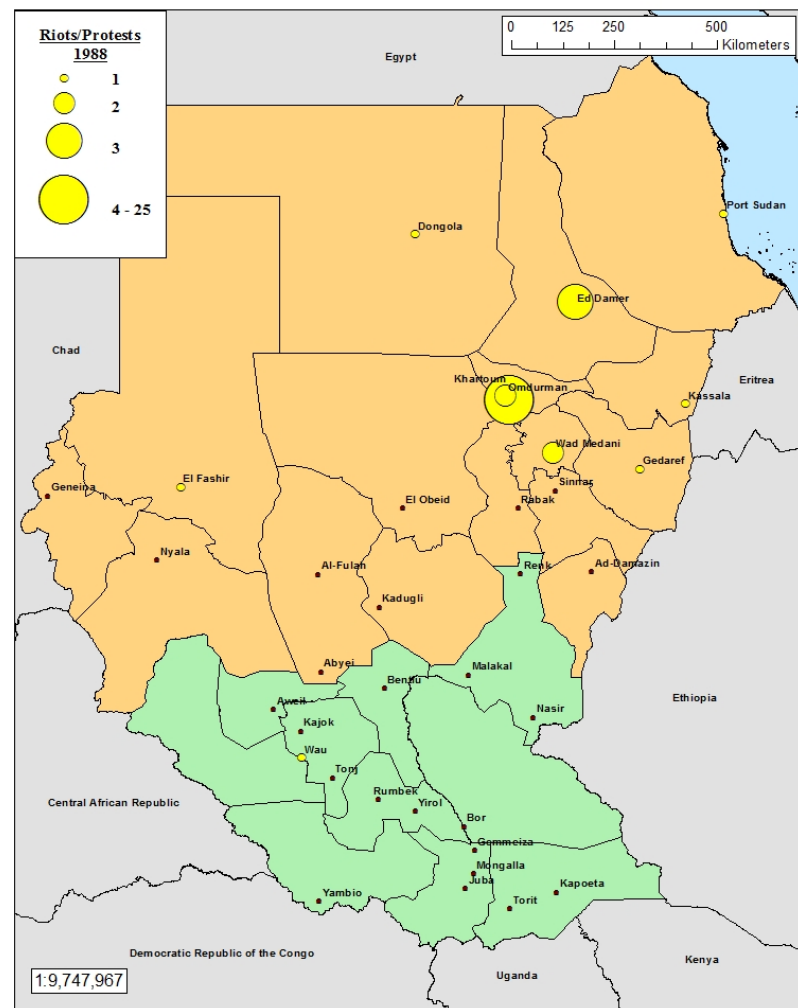
Map 27: All “Riots/Protests,” 1985



Map 28: All “Riots/Protests,” 1986



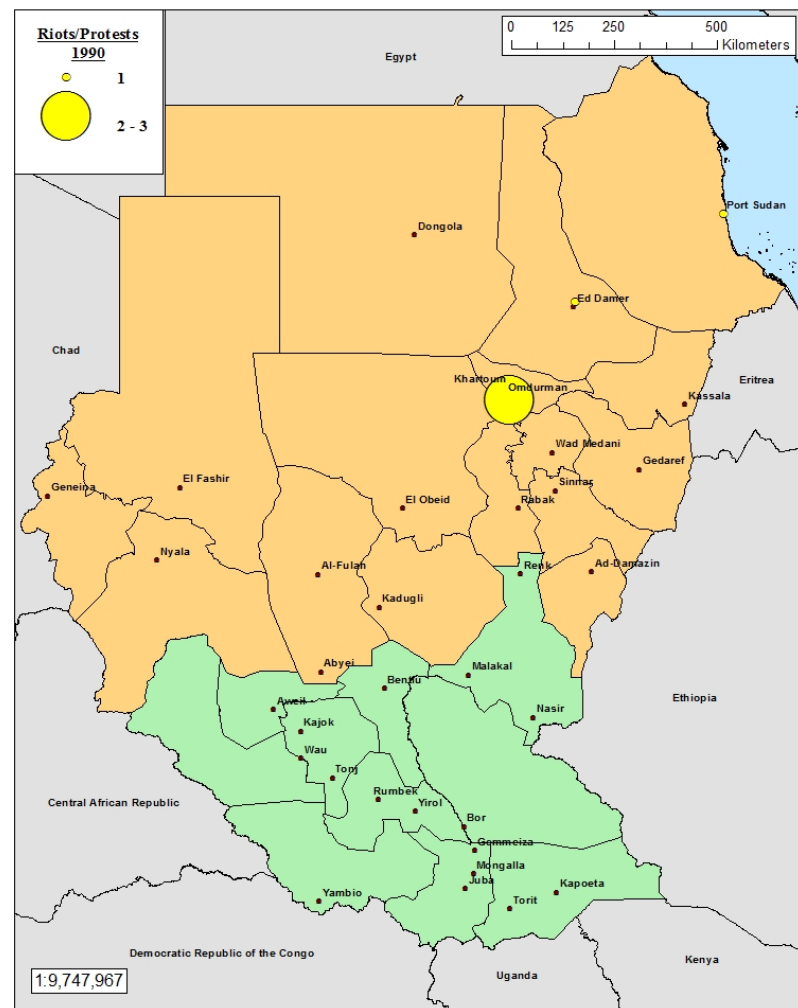
Map 29: All “Riots/Protests,” 1987



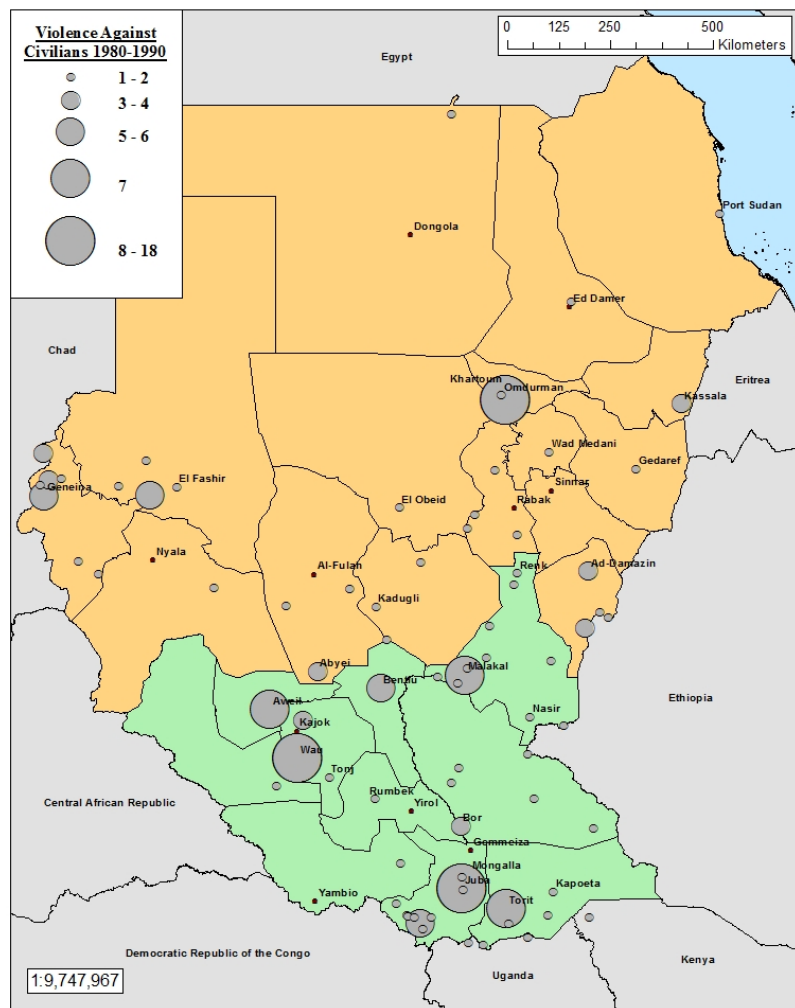
Map 30: All “Riots/Protests,” 1988



Map 31: All “Riots/Protests,” 1989



Map 32: All “Riots/Protests,” 1990



Map 33: All “Violence Against Civilians,” 1980 - 1990



Map 34: All “Violence Against Civilians,” 1981



Map 35: All “Violence Against Civilians,” 1982



Map 36: All “Violence Against Civilians,” 1983



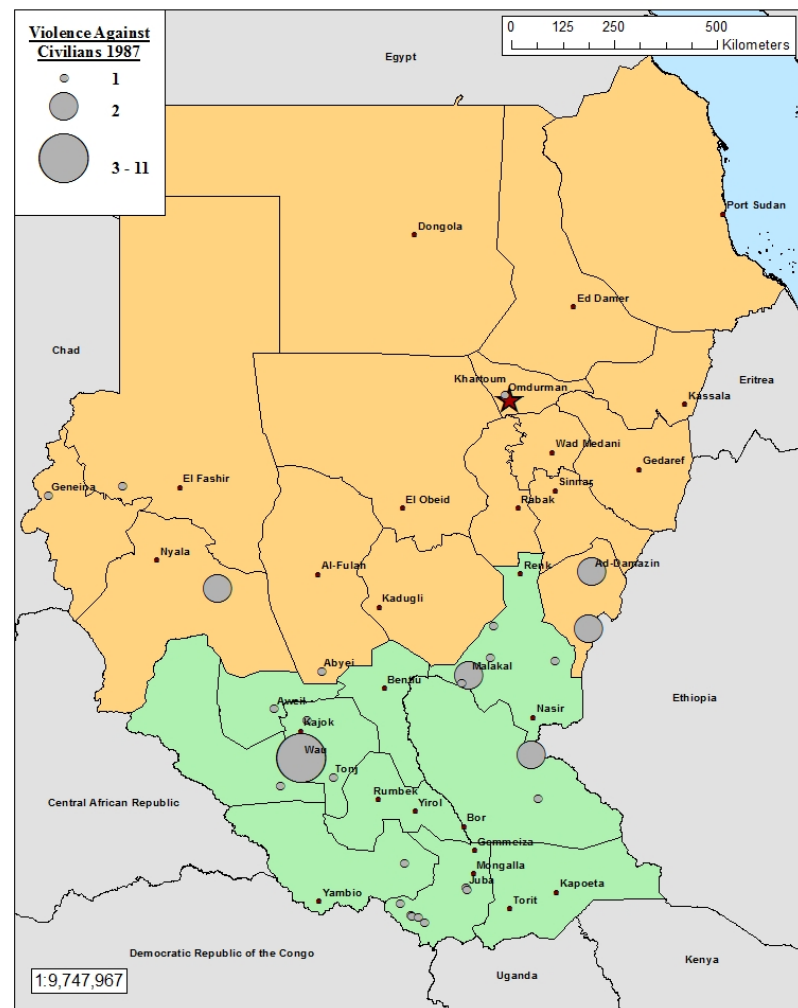
Map 37: All “Violence Against Civilians,” 1984



Map 38: All “Violence Against Civilians,” 1985



Map 39: All “Violence Against Civilians,” 1986



Map 40: All “Violence Against Civilians,” 1987



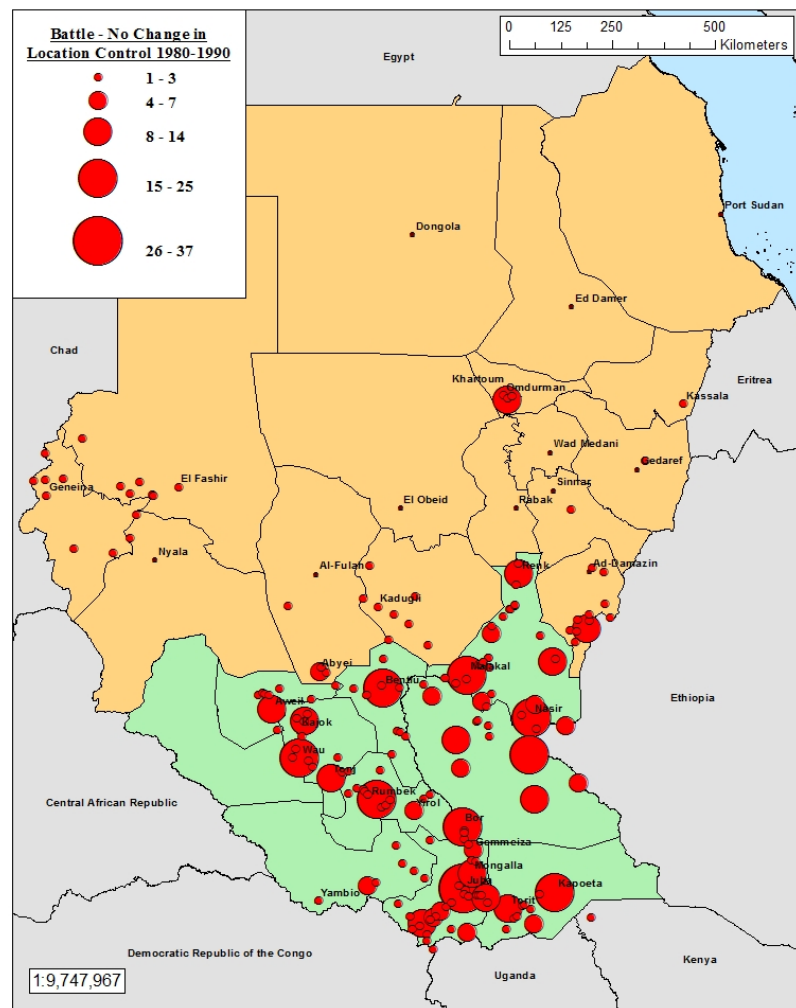
Map 41: All “Violence Against Civilians,” 1988



Map 42: All “Violence Against Civilians,” 1989



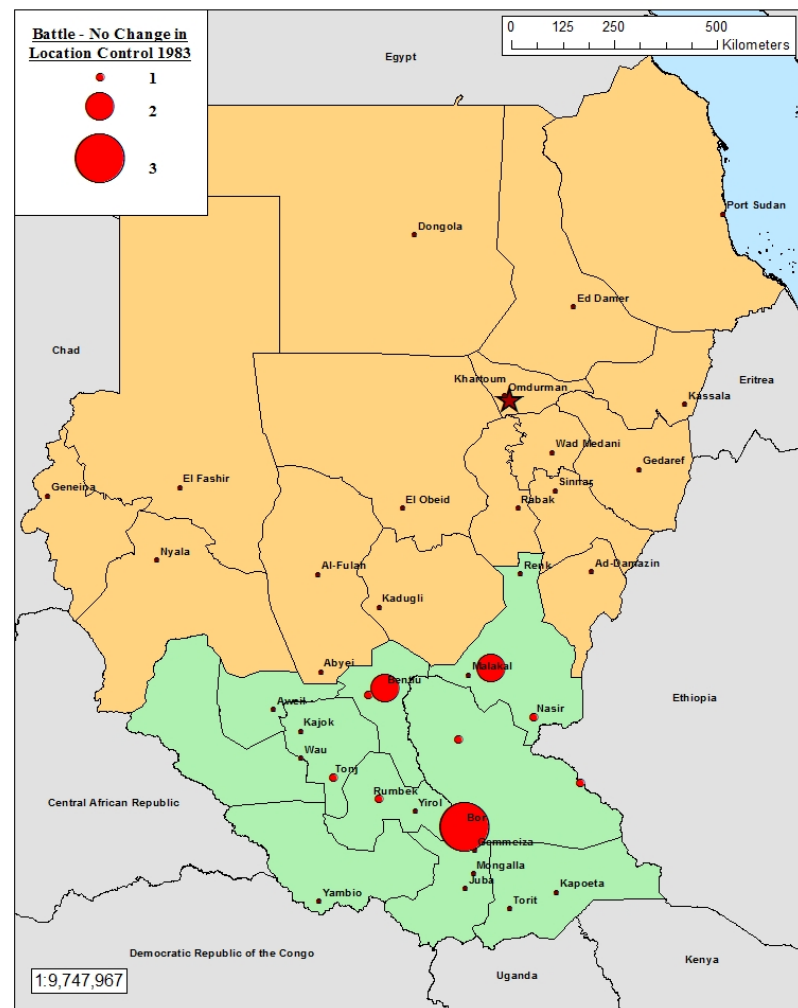
Map 43: All “Violence Against Civilians,” 1990



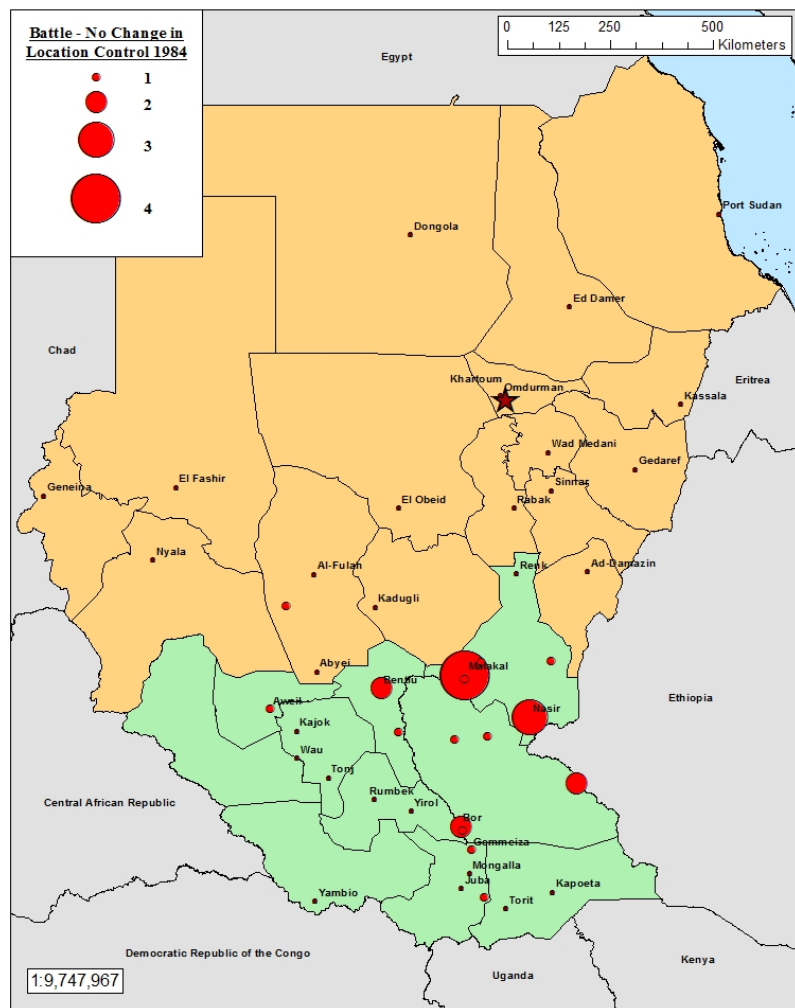
Map 44: All “Battle - No Change in Location Control,” 1980 - 1990



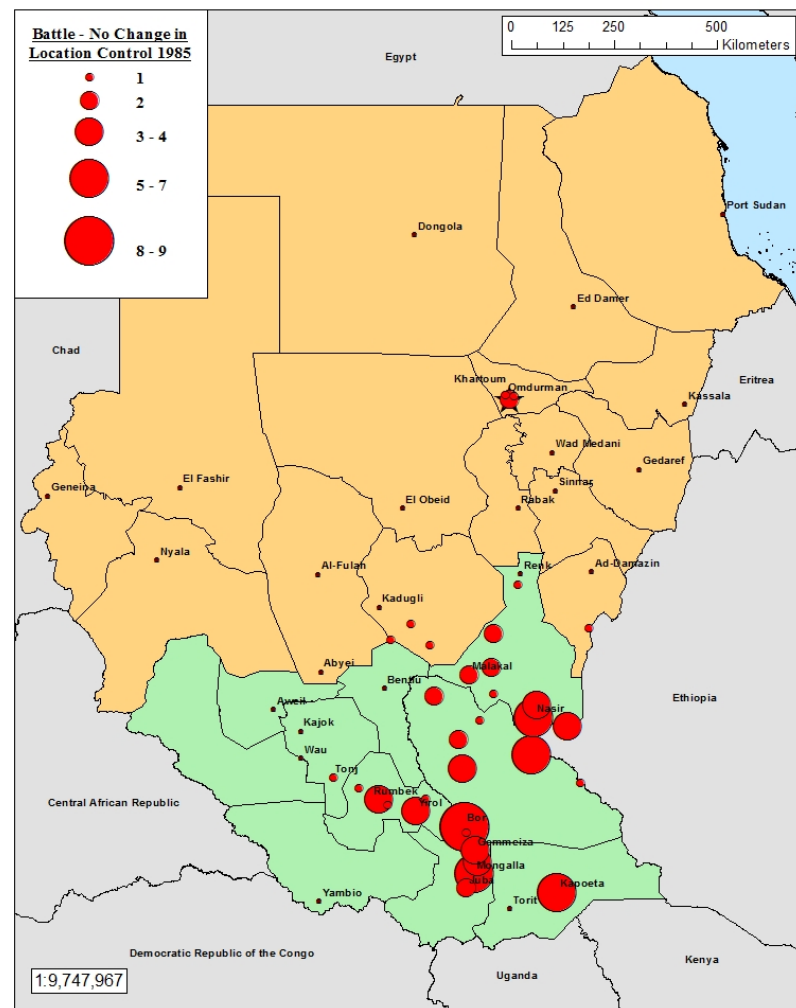
Map 45: All “Battle - No Change in Location Control,” 1981



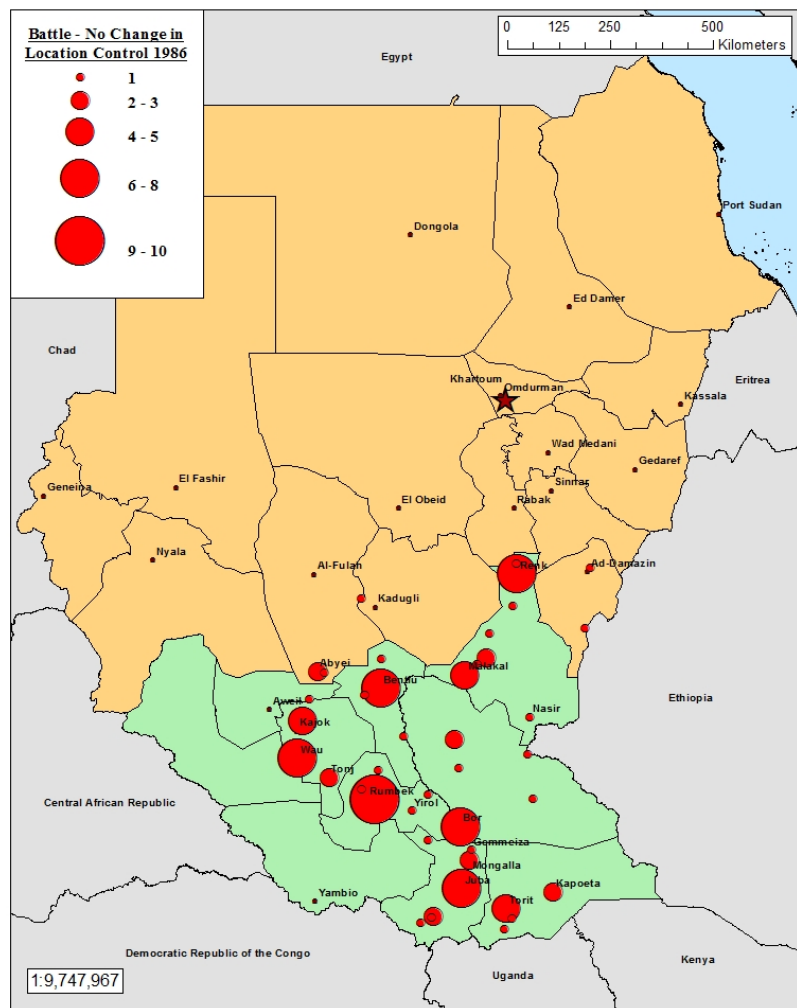
Map 46: All “Battle - No Change in Location Control,” 1983



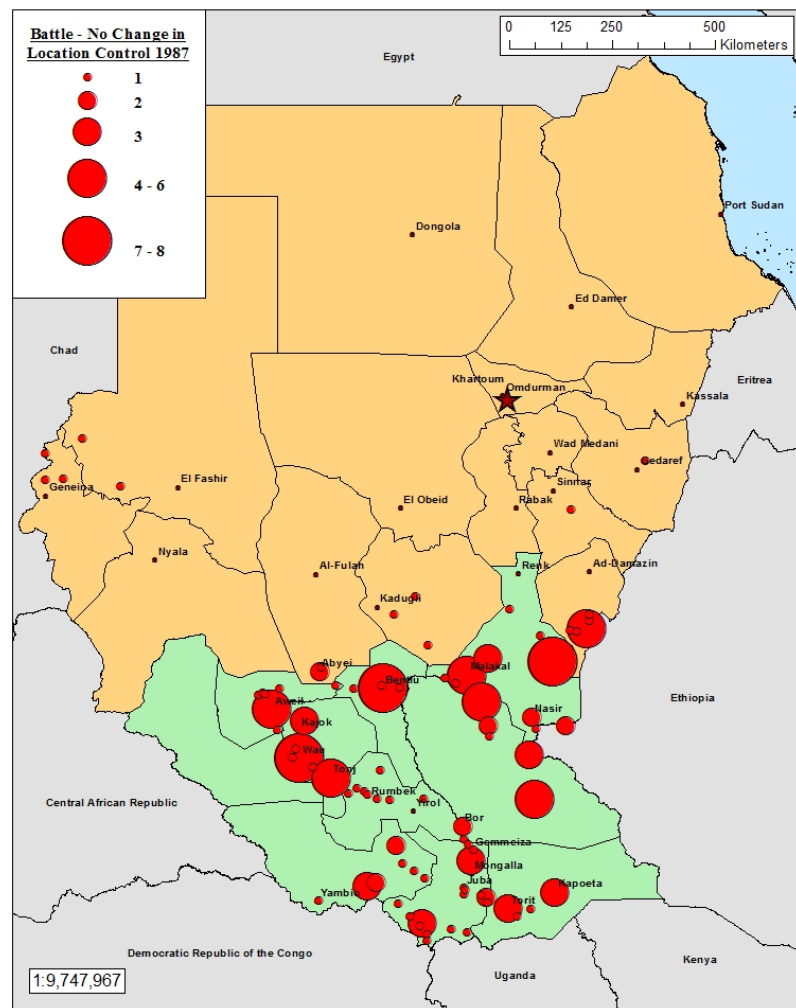
Map 47: All “Battle - No Change in Location Control,” 1984



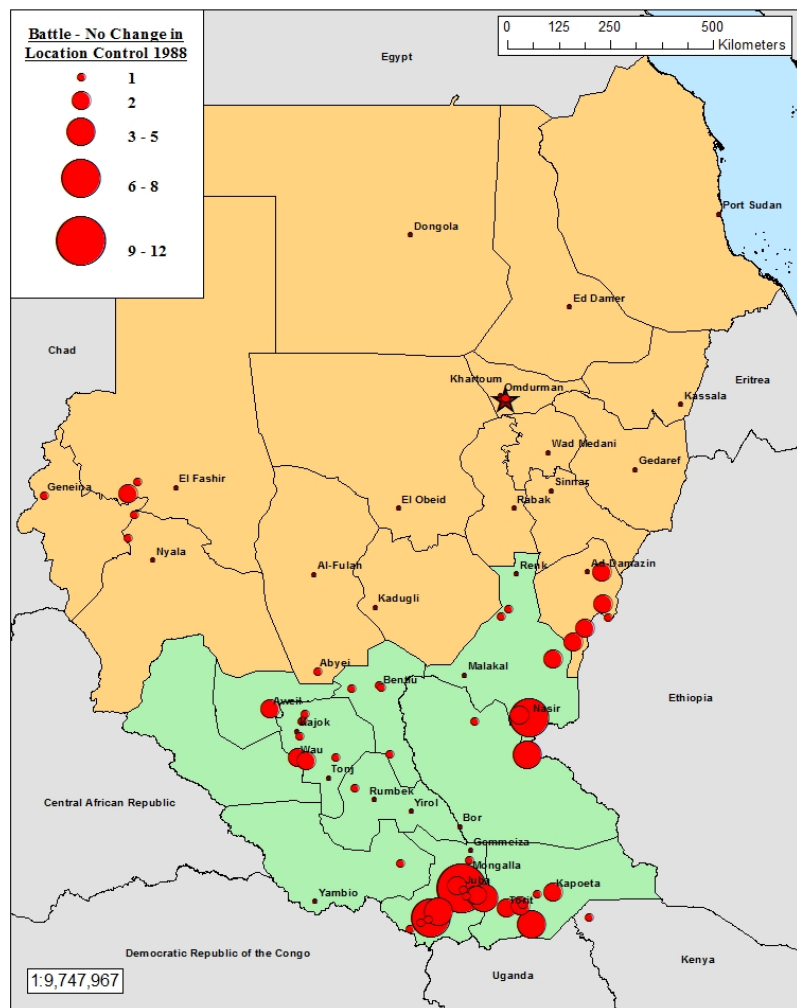
Map 48: All “Battle - No Change in Location Control,” 1985



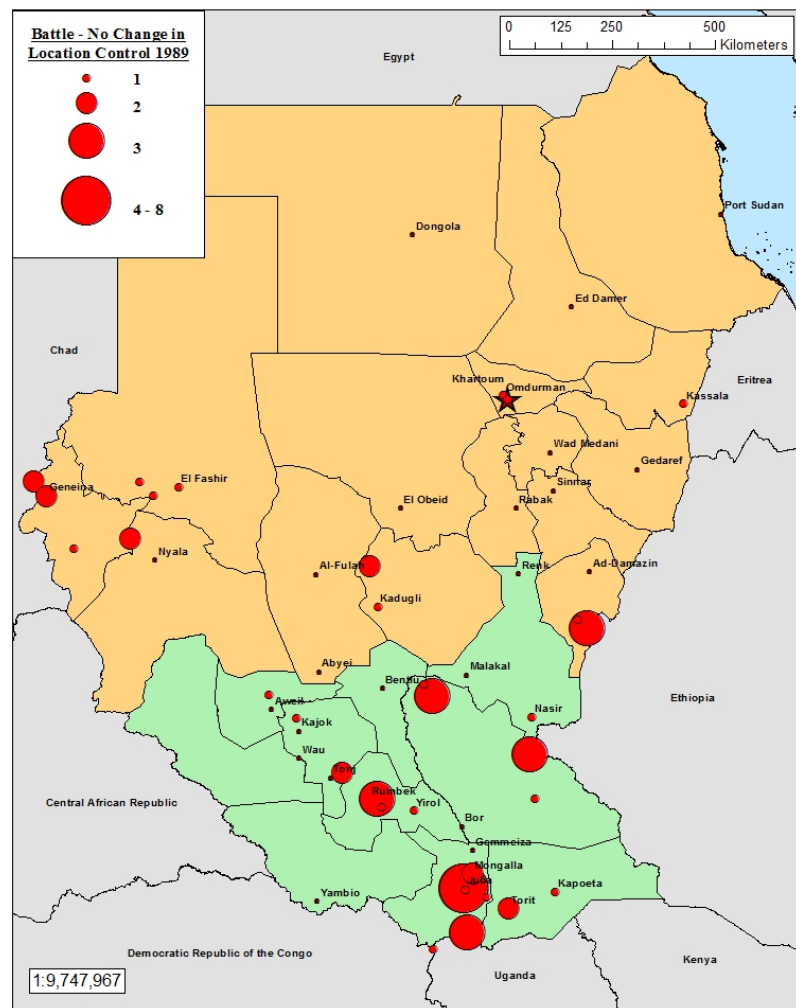
Map 49: All “Battle - No Change in Location Control,” 1986



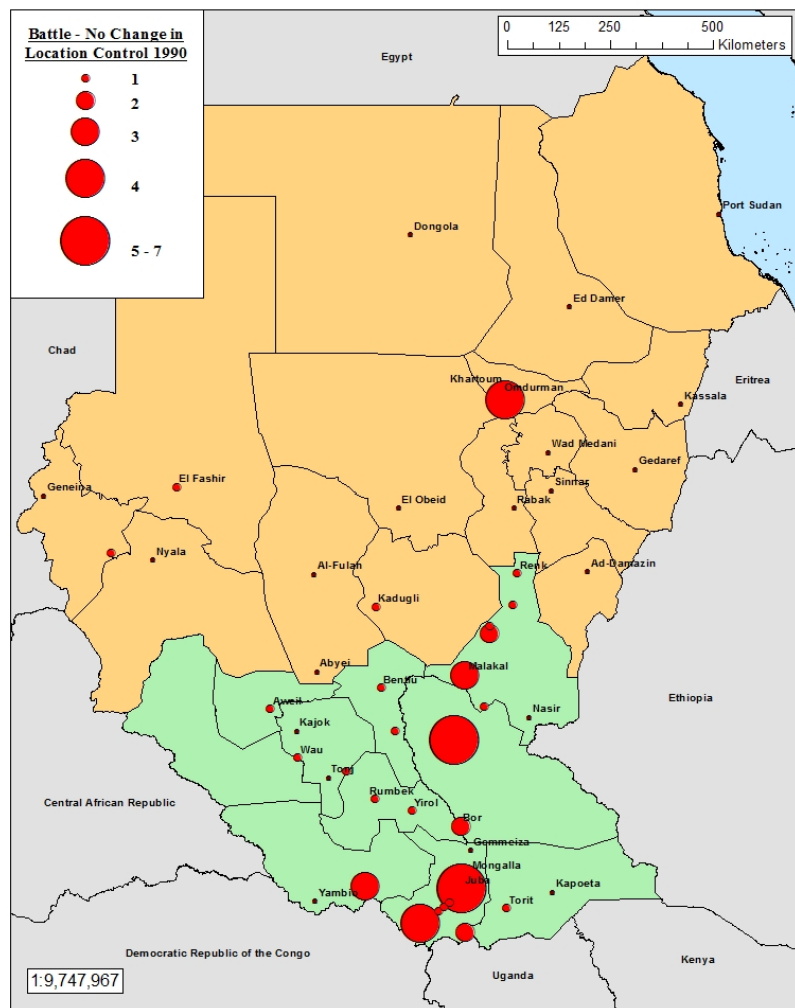
Map 50: All “Battle - No Change in Location Control,” 1987



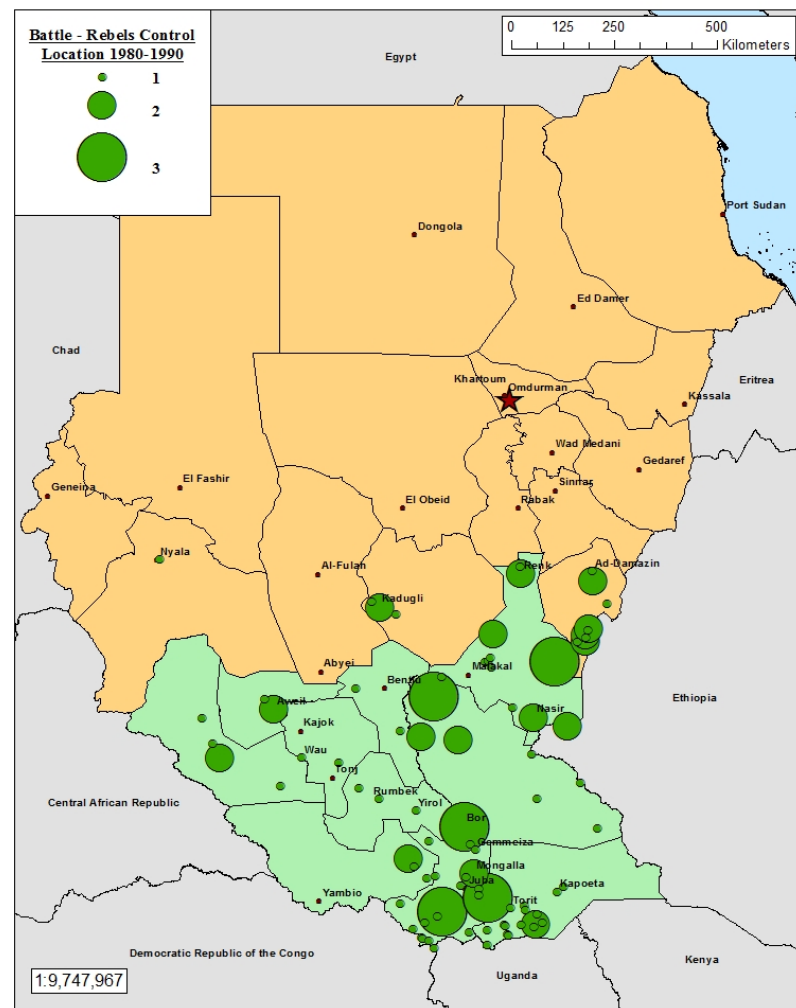
Map 51: All “Battle - No Change in Location Control,” 1988



Map 52: All “Battle - No Change in Location Control,” 1989



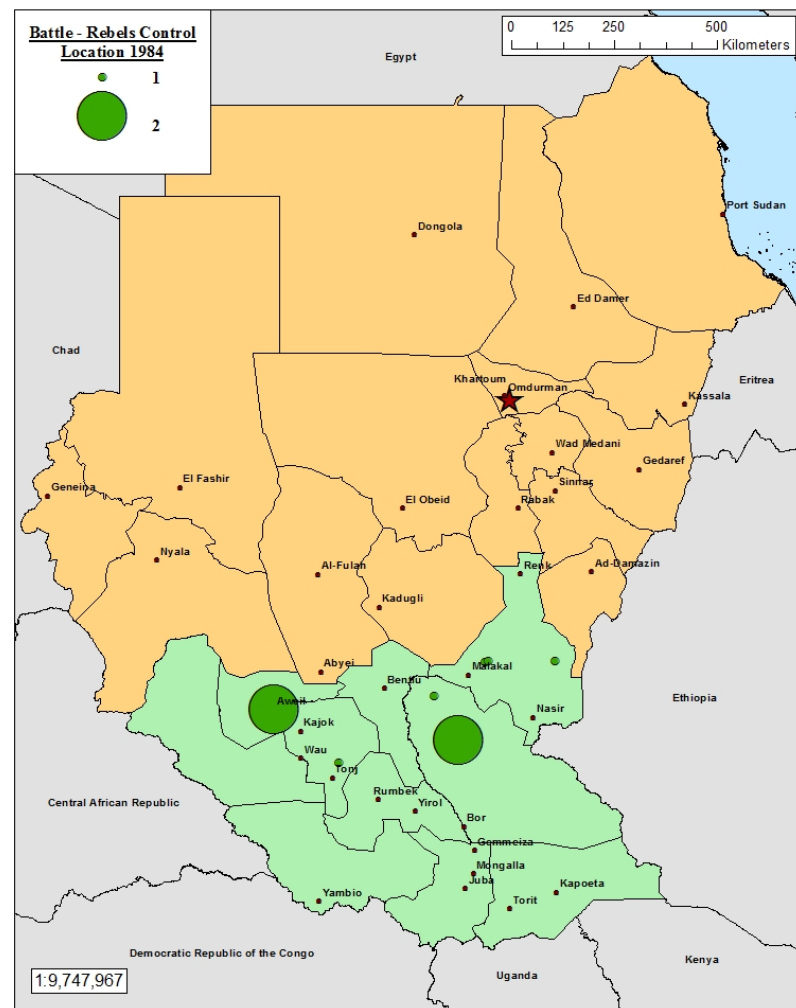
Map 53: All “Battle - No Change in Location Control,” 1990



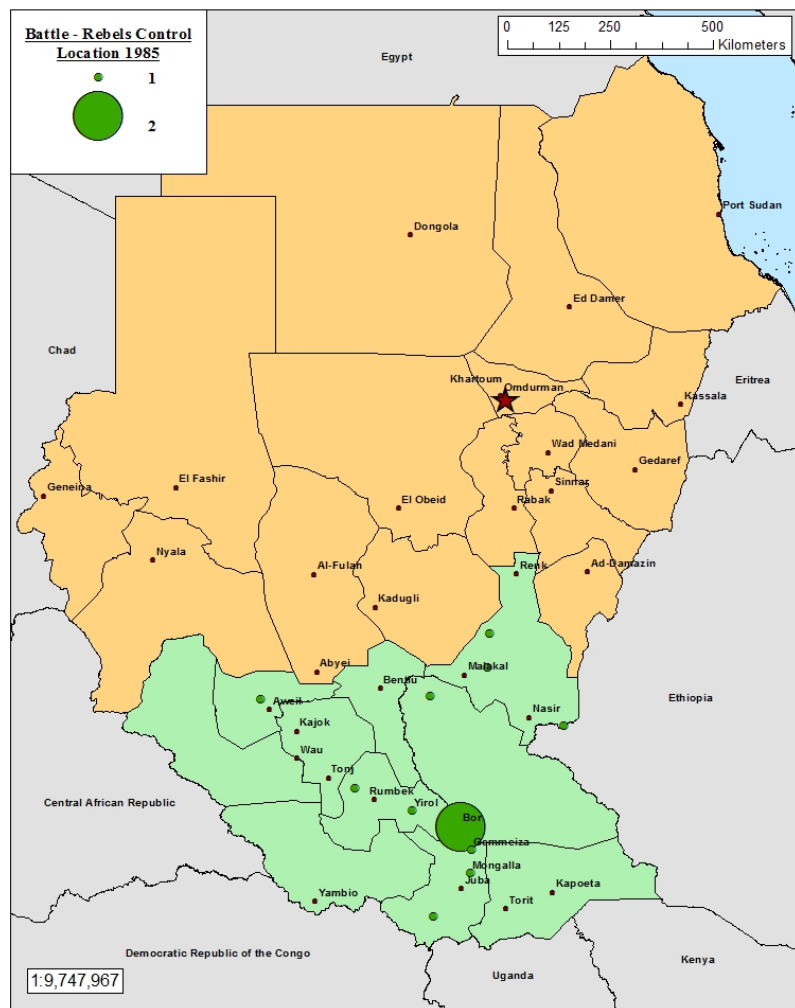
Map 54: All “Battle - Rebels Control Location,” 1980 - 1990



Map 55: All “Battle - Rebels Control Location,” 1983



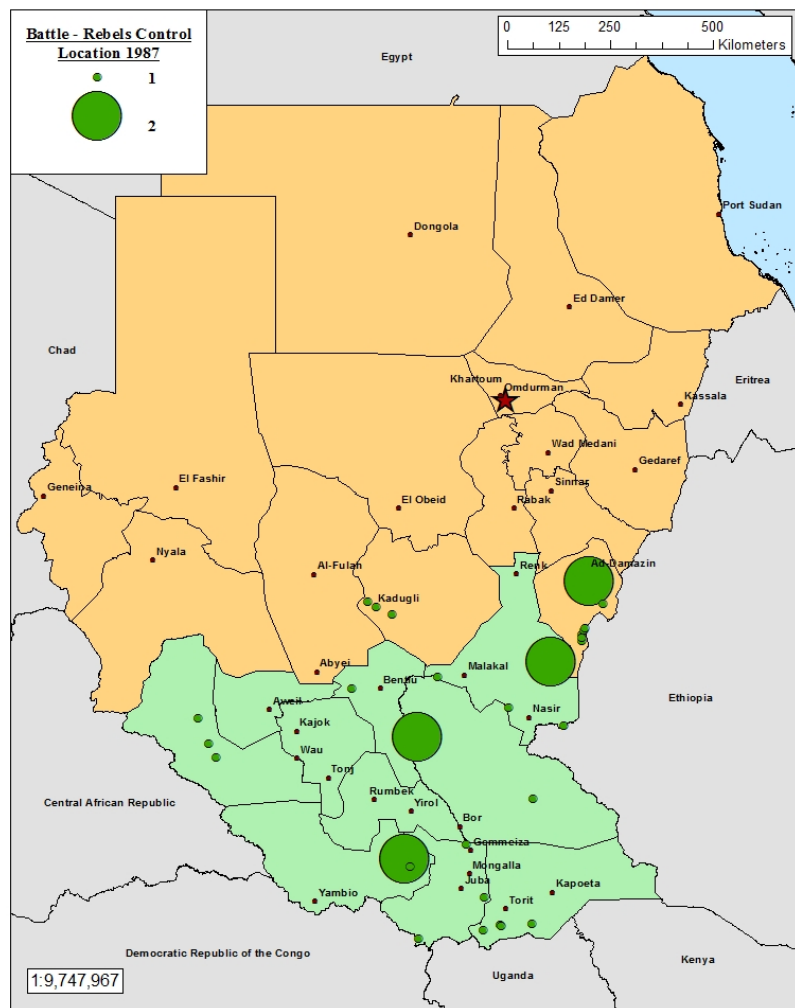
Map 56: All “Battle - Rebels Control Location,” 1984



Map 57: All “Battle - Rebels Control Location,” 1985



Map 58: All “Battle - Rebels Control Location,” 1986



Map 59: All “Battle - Rebels Control Location,” 1987



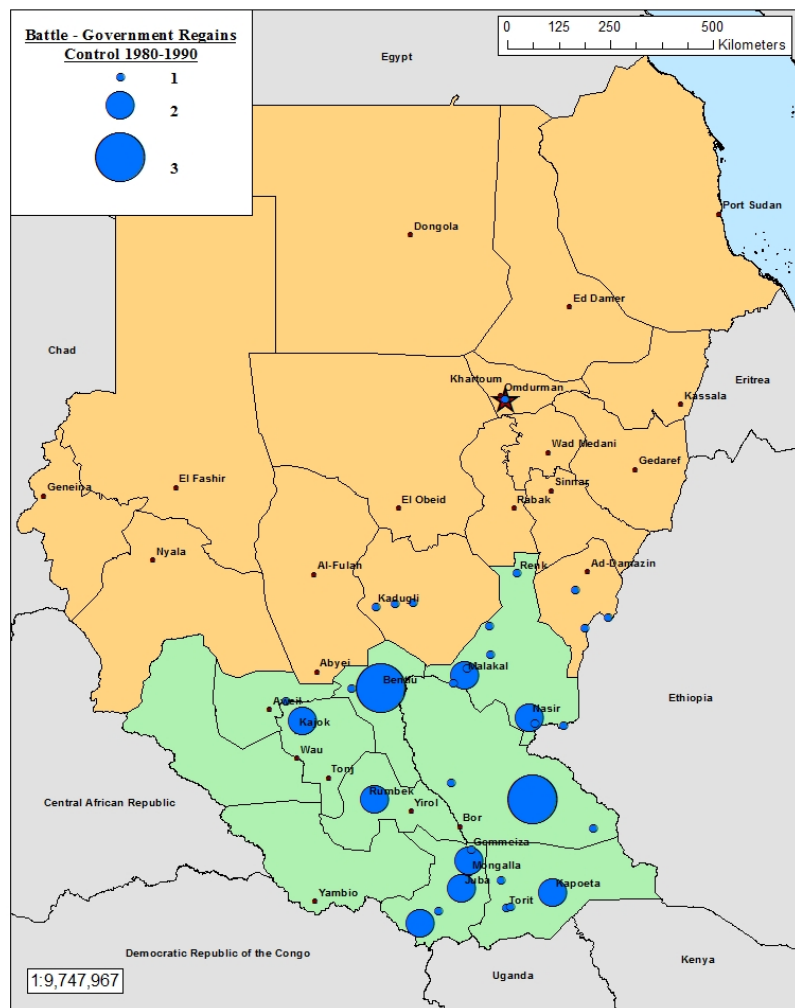
Map 60: All “Battle - Rebels Control Location,” 1988



Map 61: All “Battle - Rebels Control Location,” 1989



Map 62: All “Battle - Rebels Control Location,” 1990



Map 63: All “Battle - Government Regains Control,” 1980 – 1990



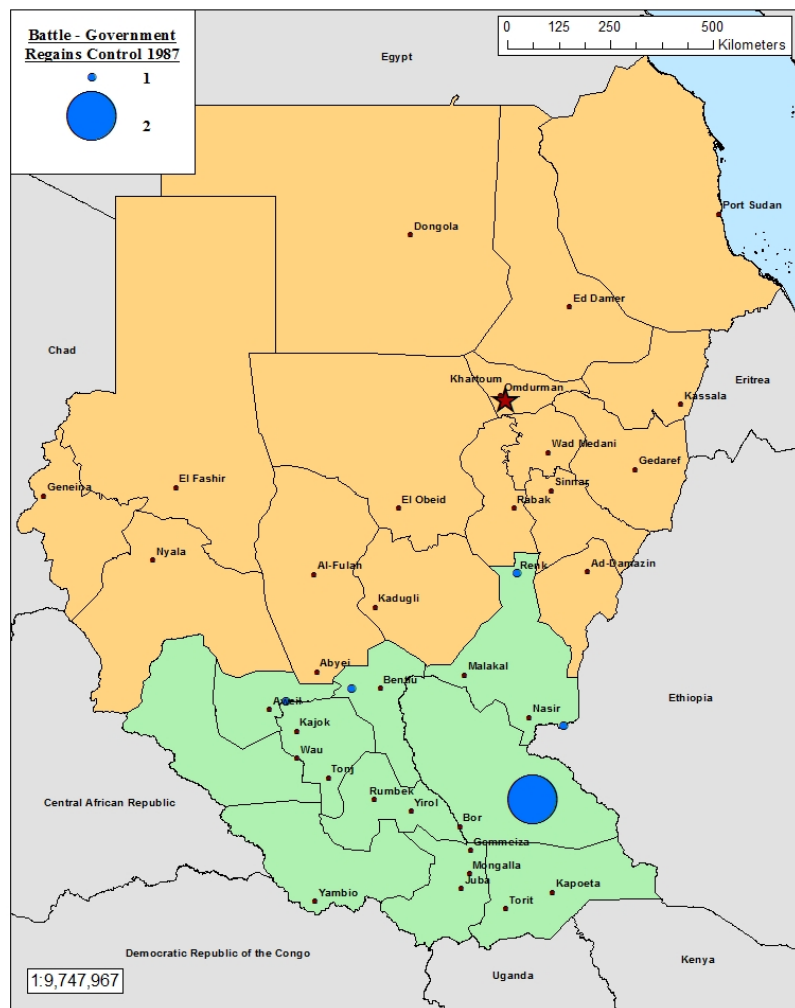
Map 64: All “Battle - Government Regains Control,” 1983



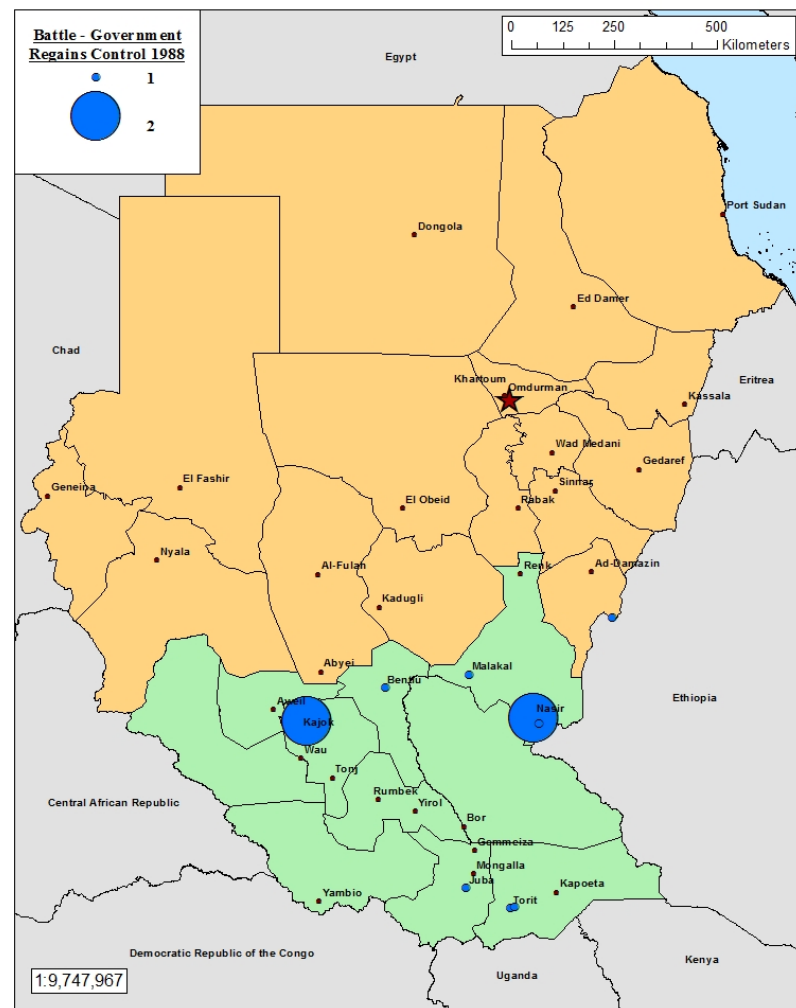
Map 65: All “Battle - Government Regains Control,” 1984



Map 66: All “Battle - Government Regains Control,” 1986



Map 67: All “Battle - Government Regains Control,” 1987



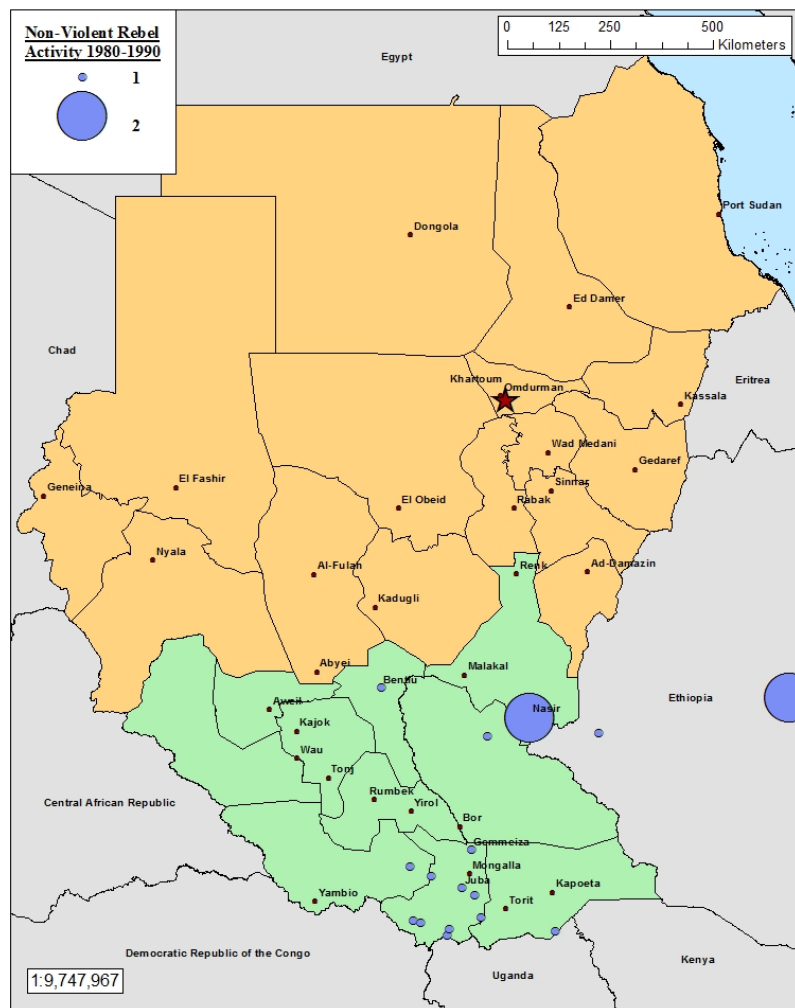
Map 68: All “Battle - Government Regains Control,” 1988



Map 69: All “Battle - Government Regains Control,” 1989



Map 70: All “Battle - Government Regains Control,” 1990



Map 71: All “Non-Violent Rebel Activity,” 1980 - 1990



Map 72: All “Non-Violent Rebel Activity,” 1984



Map 73: All “Non-Violent Rebel Activity,” 1985



Map 74: All “Non-Violent Rebel Activity,” 1986



Map 75: All “Non-Violent Rebel Activity,” 1987



Map 76: All “Non-Violent Rebel Activity,” 1988



Map 77: All “Non-Violent Rebel Activity,” 1989



Map 78: All “Non-Violent Rebel Activity,” 1990

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